```
gcatgctgtt ttcaatgtgg acctcatgag caagaaaatt catctgactg agaatgggat
                                                                  1440
aagggtggat attggcgata caataatcta tctggttcat taaactcatg cacattggag
                                                                  1500
atttatectg gtttettagg aatactacta etetgattgt gtetactgat tggetateag
                                                                  1560
aaccttaggc tqgacctaaa tagattgatt tcatttctaa ccatccaatt ctgcatgtat
                                                                  1620
tcataattct atcaagtcat ctttgattcc tggacctaat aaattttttt tccctttctt
                                                                  1680
tgggtgtcca agagaaatgg tttttgccaa actcttttta aaaaacaaat tgttgctatt
                                                                  1740
tcctagaagt ttctggtttt taagatgaac ataaaagtgt cagtatgctt cttttatgag
                                                                  1800
gtgtacttta tactttgatg aaggctaagg tgtacctaac agctttttat agtatattca
                                                                  1860
                                                                  1920
tttatggagt tagctgtatt ttttttaaaa aagaaaagta gtaaattagc agcttttttt
1980
ttcaattact aagtattttg tataaagaac aaataggtcc tgcattttat aagacttttt
                                                                  2040
aaagetttaa ttatteaact aagaaceaat aatggettet teaaggetaa tateaatagt
                                                                  2100
ttataagcag tatatttcac ctacactaaa tatqqqcatt ttaaaaqaaq attcccccct
                                                                  2160
tecececag aaatetgeat ttactaaatt tgtettaagt ecaattgtgt ttaaaggtea
                                                                  2220
tgctggtcgg gtgtggtggc tcacacctat aatcccagca ctttgggagg ccaaggtggg
                                                                  2280
cagteacetg aggteaggag titgagacea geetgaceaa catggtgaaa ceeegtetet
                                                                  2340
actaaaaata caaaaattag cttggcatgg tggcgggtac ctgtaatccc agctgcttgg
                                                                  2400
gagtgtgagg caggagaatc gcttgaacct gggagaccga ggttgcagtg agctgaaacc
                                                                  2460
gtgccattgc actccagctt aggcaacaag agtgaaactc tgtctcaatc aatccatcaa
                                                                  2520
tcaatcaata aaatagaggt catgctgact attaaaaaaa aaaaaaa
                                                                  2567
```

```
<210> 5466
<211> 4305
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(3140)
<223> similar to gi4240219 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5466
cgagcaagtg gaatgtgtac aagagggagt taccatggaa acagcatatt ctcctggtaa
                                                                       60
ccagaatgga gttttggact tttttttcca gaagccatct ggatttctca ccttattgga
                                                                      120
tgaagaaagt caaatgattt ggtcagtgga atcaaatttt ccaaaaaaac tacaaagtct
                                                                      180
cctagaatcc tcaaacacaa atgcggtgta ctcccccatg aaggatggga atgggaatgt
                                                                      240
tgccctcaaa gaccacggta cagccttcac catcatgcac tacqcaggaa gggtaatgta
                                                                      300
tgatgttgtt ggggcgattg aaaaaaataa agactccctt tcacaqaatc ttctatttqt
                                                                      360
aatgaaaact agtgaaaatg tegtgateaa teatttgtte eagtegaaat tgteacaaac
                                                                      420
aggatecete gtatetgeet atcetteett taaatteega ggacataagt etgeeetget
                                                                      480
cagtaagaaa atgacagctt cttcaattat tggagaaaac aagaattatc tagaacttag
                                                                      540
taagttatta aaaaagaaag gaacttctac atttcttcaa agattggaac gaggagatcc
                                                                      600
agtcaccata gcatcacaac tcaggaaatc actaatggat attattggaa aacttcagaa
                                                                      660
gtgcactcca cacttcattc attgcatcag gcccaataac tcaaagctgc cagatacttt
                                                                      720
tgataatttt tacgtgtctg ctcagctaca atatattggg gtcctggaga tggtgaagat
                                                                      780
etteegatat ggataeeetg ttegeettte etteteggat tteetgteaa ggtataagee
                                                                      840
actggctgat acattcctgc gtgagaaqaa qqaacaqtca qctqccqaqc qatqtcqact
                                                                      900
tgttctccag cagtgtaaat tacaaggctg gcagatggga gtccgaaaag tgtttctaaa
                                                                      960
atactggcat gctgaccaac tcaatgattt gtgcctacag ttgcagagaa aaattataac
                                                                     1020
```

```
ctgccaaaaa gttatcagag gatttttagc acgccagcac ctgcttcaga gaataagcat
                                                                     1080
cagacaacaa gaggtgactt ctatcaatag ctttctgcag aacacagagg acatggggct
                                                                     1140
gaaaacctac gatgccctgg tcattcagaa tgcttcagac attgcccggg aaaatgaccg
                                                                     1200
gctccgtagt gaaatgaacg ctccctacca taaagagaag ttagaggtca ggaacatgca
                                                                     1260
agaggaagga agcaaaagaa ccgatgacaa gagtggaccc aggcatttcc accccagctc
                                                                     1320
catgicagic tgcgcggccg tggatggcct gggccagigc ctcgttggcc cgtccatcig
                                                                     1380
gteteetteg etgeactegg tgtteageat ggatgaeage ageageetee egteteeaeg
                                                                     1440
gaaacagccc ccgcccaagc caaagaggga ccccaacacc cggctgagtg cttcctatga
                                                                     1500
ggetgtgage geetgeetet eegeggeeag ggaageggee aaegaagete tggeeeggee
                                                                     1560
                                                                     1620
cagaccgcac agcgacgact acagcaccat gaagaagatt cctcctcgaa agcccaagcg
                                                                     1680
cagococaac accaagotoa goggotocta ogaggagata toggggtoco ggocogggga
cgcgaggccc gcgggcccc cgggggcagc agcgcgcgtt ctgacccccg ggactccgca
                                                                     1740
gtgegegetg ceceeggegg egeeteeggg tgaegaggae gaeagegage etgtgtaeat
                                                                     1800
cgagatgetg gggcacgegg ccaggecega tageceggae ceeggggagt cegtgtaega
                                                                     1860
ggagatgaag tgttgcctgc ccgacgacgg cggcccgggc gcgggctcct tcctgctcca
                                                                     1920
eggegeateg cegeceetge tecacegege geeggaggae gaggeggegg ggeeeecagg
                                                                     1980
ggacgcgtgc gacatecege egecetteee caacetgetg cegeacegge egeceetget
                                                                     2040
ggtgttcccc ccgacccccg tcacctgctc ccccgcctcc gacgagtcgc ccctgacacc
                                                                     2100
cctggaggtg aagaagctgc cagtcctgga gaccaacctc aagtaccccg tgcagccgga
                                                                     2160
ggggtcgagc ccgctgtccc cgcagtactc caagagccag aagggcgacg gcgacaggcc
                                                                     2220
egegteecce ggeetggege tgtteaacgg gteeggeega geeteecege egteeacgee
                                                                     2280
geoccegece eegeceeege eegggeegee eeegggeee tacaggeeet gegegeaett
                                                                     2340
ggccttcccg ccggagcccg ccccggtgaa cgcggggaaa gcggggccga gcgcagaggc
                                                                     2400
gcccaaggtc cacccaaagc caaactetgc ccccgtggcc gggccctgca gctccttccc
                                                                     2460
caagateeca tatteeceeg tgaaggeeac cagggeggac gecaggaagg eeggeteeag
                                                                     2520
tgcctcgccc cccgcgccct acagccctcc cagctccagg cctctcagca gccccctgga
                                                                     2580
cgagctcgcc agcctcttca actcggggag gagtgtgctt cggaaatccg cggcgggaag
                                                                     2640
                                                                     2700
aaaaatcagg gaagccgaag gttttgaaac taacatgaac ataagtagcc gagatgaccc
tagtacgtca gaaattactt ccgagactca agacagaaat gcaaataacc atggaattca
                                                                     2760
gttatctaat tcactatcta gtgctataac tgctgaaaat ggaaattcca tctcaaatgg
                                                                     2820
tttacctgaa gaagatggat actcacggtt gtctataagt ggcacaggga cttcgacatt
                                                                     2880 .
tcaaagacac agggacagtc acaccactca ggtaatccat cagctgaggc tctcagagaa
                                                                     2940
tgaaagtgtg gccctgcagg aactcttgga ctggaggaga aagctctgtg aggaaggaca
                                                                     3000
agactggcag cagatectge accaegetga geceagggtg cetececeae cacettgcaa
                                                                     3060
gaagcccage cttctgaaga agccggaagg ggcctcctgc aacaggctgc cgtctgagct
                                                                     3120
ctgggacacc accatttgat gtggcctgaa ctgcagactt acaaaataga actgcctact
                                                                     3180
gattccgggc tgcaacaaca gaaggctgcc ttctgacatg cgctggggct tctctccacg
                                                                     3240
catttagaca aaaaaagcac aggacacaga cactaaatat atgagatccc gtgtgtgtgt
                                                                     3300
gtgtgtgttt gtgtgtgtgt gtgtgggttc tttcttatcc atctcggggg gatacactct
                                                                     3360
gatttttdaag ctcctcattt acggctctgt gctaccccta ggtagcaaga gagaggctgg
                                                                     3420
gaaaagtgtg gacgtggcca gagcgagaga gtagcggagg aaaggagcaa tccatgcaca
                                                                     3480
ctctgtacag ttgttttct acggttcaac agtctgttta ttgtacttcc aatggtttta
                                                                     3540
ttataataca gtatacggga catatatttt atttctttgt agctacttgt gttttattgg
                                                                     3600
tattataaac ctgataatta tttacatgtt tattactgta attttataaa tttatgcaat
                                                                     3660
tggtggtgct tcctttcttc aaaatacaga ttttaaaaaaa tcatttctag attatatctc
                                                                     3720
atcctccaca gtccttttt tttcacctaa cgcacctaaa tcttgaaact acattgttgt
                                                                     3780
tttagcttcg ccagtgtcac cccttgcaaa actatgaatt gagccccatg ttttaggtgt
                                                                     3840
tactcatgga tgaggaggct gttctttcct atgccctgta tttctggata agtggattgt
                                                                     3900
gcaacccatt agttaaattt cacctcccga cttcaagcat agatcacagg aaatcacatg
                                                                     3960
gcacacggtt aaacacgtat ggcttcaaat ccatagccgg tggtgtaaaa tgatcatatt
                                                                     4020
cattcaaagg cctacacagt acaaatgagc acgctgccat gtactggttt gagcagtagg
                                                                     4080
ggctgcatcg cacagegeet egteeeeegg gaettacaet geatgattee etegetgtat
                                                                     4140
atceteaace eteccataat geaaggeett gtteattgat gtgetttegt eggetgtegg
                                                                     4200
aaagttetga geagtggete eagaceaeet tgtettgeta ettggaaett tttatteata
                                                                     4260
ccagcctttg aaaagttact gtgccaataa agaggtacaa ctgtg
                                                                     4305
```

```
<210> 5467
<211> 2436
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(1228)
<223> similar to gi3808148 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5467
                                                                       60
cgaacctcag tcaaggtgaa gttctcggag ctgtccgagg agctgctctg ggaatacgtc
                                                                      120
cacagtgtgg agcccatgga caaagctggc ggctacggga tccaggccct gggcggcatg
                                                                      180
ctggtggagt ccgtacacgg ggactttctg aacgtggtgg gattcccgct gaaccacttc
                                                                      240
tgcaagcagc tggtgaagct ctactacccg ccccgtccgg aggacctgcg gcggagtgtc
aagcacgact ccatcccggc cgcggacacc ttcgaagacc tcagtgacgt ggaggggggt
                                                                      300
ggctcggagc ccactcagag ggacgcgggc agccgcgatg agaaggccga ggcgggagag
                                                                      360
                                                                      420
gegggaeagg ceaeggeaga ggetgagtgt caeaggaete gggagaeeet geeteegtte
ccgacacgcc tcctggagct gattgagggc tttatgctat ccaagggcct gctcaccgct
                                                                      480
                                                                      540
tgcaaactga aggtgttcga tttgttaaaa gatgaagcac cccagaaggc tgcggatatt
                                                                      600
gccagcaaag tggacgcctc tgcgtgtgga atggagaggc ttctggacat ctgtgctgcc
atggggetee tggagaagae agageaaggt tacagtaaca cagagacage gaacgtetae
                                                                      660
ctggcatcgg atggcgaata ctctctgcac ggcttcatca tgcacaataa tgacctcaca
                                                                      720
tggaacctct ttacatacct ggagtttgcc atccgagagg gaacaaacca gcaccacagg
                                                                      780
gcgttgggga agaaggcgga agatctgttc caggatgcgt actaccagag cccggagacg
                                                                      840
eggetgaggt teatgeggge catgeaegge atgaegaage tgaetgegtg ceaggtggee
                                                                      900
acggcettca atetgteecg etteteetee geetgegaeg tgggaggetg caceggtgea
                                                                      960
ctggcccgag agctggcccg tgagtaccct cgtatgcagg tgactgtgtt tgacctccca
                                                                     1020
gacattatcg agetggeege ceaetteeaa ceceeggae egeaggeagt geagateeae
                                                                     1080
ttegeageag gtgaettttt cagggaeeee eteeeeageg etgagetgta egteetgtge
                                                                     1140
eggateetge atgaetggee agaegaeaaa gteeaeaagt taeteageag ggtegeegag
                                                                     1200
agegttetga geteetgttg cetgetgtgt cecetgtgte etgetgaagg ateceegeet
                                                                     1260
ggetggeeag gaeteeaget etetgetgte teeeteaggg geeggeetge tgetggtgga
                                                                     1320
                                                                     1380
gacgeteete etageaggea gacggetget gtgacggtge egtetaceag geagggtete
                                                                     1440
agteettete egeacteeag cetgeatett cecatettet geacgattte eagtgtgttt
cctccatggg acgccatcgc tgccgctcac ccctggatgc ccacaggcta tggagtggca
                                                                     1500
gttctctggg cggcttccat ctctcctgcc ttggtgcaga gactgtcacg agcgggacct
                                                                     1560
ccccagcccc tgctgcgggg ctgaaatgcg tctgtaaaca cccccaccc cgagcccagg
                                                                     1620
caggocagae teacacecae ecegtgagge ceteetggge acatgeteae tgeggttgta
                                                                     1680
gggageteag egeateeacg ttteeceegt geteegetee eagetgetgt teeeggeetg
                                                                     1740
tgtcccgacc ctcagacctc agttcaccct ctggtgccca cacagccccc tttcctccct
                                                                     1800
ggcccctcca ccagggaatg gctgggccaa cctggggctg ggctggggtg gagcccttta
                                                                     1860
acteacagee ttgacettag gaggeactga ggttcaggag geatetgeaa agegagaace
                                                                     1920
                                                                     1980
ggagcaggcc taggtgctgt tttcacggcg cgtgcaccca gcttacctgt tcctgggctg
ggcgtcagtc tcctatattt cagctgtttt cctttttctg agacagactc tggagtttag
                                                                     2040
ctettettae ceagactgga gtacaataat geaatetegg eteactgeaa eeteegeete
                                                                     2100
                                                                     2160
ctgggcagtc tatttcaagg tgcaaactcc gcctcctggg cggcctattt caaggtggaa
                                                                     2220
gccccacctt ctaggcctat ttcaaggtgc aagccccgcc tcccgggcgg cctattacaa
                                                                     2280
ggtgcaagct ccgcctccca ggcggcctgt ttcaaggtgc aaccccacct cccgggcggc
ctatttcaag gggcaagccc tgcctcctgg gcggcctata tcaaggtgcg agctctgcct
                                                                     2340
```

```
<210> 5468
<211> 1129
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1114)...(387)
<223> similar to gi4579696 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5468 ttttcaagca cgattccttt atttcgagcc agaaagcagc cagtaaacaa gtgctgccac 60 120 ccacaacacc ctgggctacc tgcggtcccg cgcctggccc tgcagcctcg gaagggagct gtgggggtca cccagggccc acttcgtgcc cccaccctgc ccccaccctg ccctgctcac 180 teccageege tgeteceett eetaaagage agtecetget tgagagetet gaggageaae 240 ttgtttctaa tccacaggat cctgcactaa gagcccccc cacagctatc gtggggcacc 300 ccaacgtatt ccacccctct gccccaggca cccaaggggc atgggcacgg ccagaaggcc 360 tgtcaggagg gccagcagca cccccgaggc ttgtccccaa ggttgggcgg tttggggctg 420 gegggeacgt tetecaggae etcaegeagg gagaatgtae aaaaggaaat etcateatag 480 gaggteetgg eccegetete gtacaggeag gcaaaaacca ggeececete aggggeegge 540 ccgatggacg ccaggtcgga gtagccgctg gggccctcgt agatcaccca gggctctgtc 600 cagctgcgcg ggtccagcgg ggactggctc aggcggatac ccatgtgtag ccgagccctg 660 720 atggggagtg ccagggtcca ggaccccaca tccccactga ccccaggcct ggggccaggc 780 tgcctggggc catcccccg aggctgcaga cggctgaagg gcccaccagg cacctggcct 840 ccacggggt ctacagcagc ctcctctggg ggttcgtgga ctccaggacc gaggagtgga 900 ggctggaggg gactcccggg gcccactgac caactgtcat cccgtggcct gttgggggg 960 ggggctggga agcccacgat gctgccctgg cagccccagg cagtctcggg cagggaagcc 1020 acgogetetg egggeaggaa ggaggtgeee tegteagtge tgagegeetg cacaeggetg 1080 cccagtgggc tccgggcatt gcagtagagg aagcgggaat tgcacctct 1129

```
<210> 5469
<211> 2414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(1625)
<223> similar to gi5917651 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5469
                                                                       60
agegtaegee caegegteeg caagggaaca actetgagaa tgatgaggaa ggagtggatg
                                                                      120
aagatgtgga ggaagatgaa tatttagaag aagatgcaga agaagatgaa gaggtggatg
                                                                      180
aagatggaga ggaggaggag gaagaggagg aggaggaaga tgaggaggag gatgaggaag
aacaagaata tgaacaggat gagagagacc agaaagagga gggaaatgat tatgacactc
                                                                      240
                                                                      300
gaagtgagge cagtgactet ggttetgaat etgttteett cacagatggg tetgtcagat
                                                                      360
ctggttcagg cacagatgga tcagatgaga aaaagaagga aaggaagaga gctagaggca
tatctccaat tgtttttgat agaagtggaa gctctgcatc agagtcatat gcaggttcag
                                                                      420
aaaagaagca tgagaaatta tcatcttccg ttcgtgctgt ccgaaaagat caaaccagta
                                                                      480
aactcaaata tgtgcttcaa gatgcaagat ttttcctcat aaagagtaac aaccatgaga
                                                                      540
                                                                      600
atgtgtetet tgecaaageg aagggtgtat ggtecaeget eeetgtaaat gagaagaaat
                                                                      660
taaatettge atttagatet geaaggagtg ttatettaat attttetgte agagagagtg
                                                                      720
gaaaatttca agggtttgca agactttctt cagaatcaca tcacggagga tctcctatac
                                                                      780
actgggtgct tccagcagga atgagtgcta aaatgctggg aggtgtcttt aaaattgact
ggatttgcag gcgtgaatta cccttcacta agtcggctca tctcaccaat ccttggaatg
                                                                      840
aacataaacc agtaaagatc ggacgtgatg gacaggaaat tgaacttgaa tgtggaaccc
                                                                      900
agetttgtet tetgttteee eeegatgaaa gtattgaett gtateaggte atteataaaa
                                                                      960
tgcgtcacaa gagaagaatg cattetcage eeegatcaeg aggaegteea teeegtegag
                                                                     1020
aaccagtccg ggatgtggga aggcgtcgac cagaagatta tgatattcat aacagcagaa
                                                                     1080
agaaaccaag gattgactat ccccctgagt ttcaccagag accagggtat ttaaaggatc
                                                                     1140
cacgatacca ggaagtggac agacgatttt caggagttcg ccgagatgtg tttttaaatg
                                                                     1200
ggtcctacaa tgattatgtg agggaatttc ataacatggg accaccacca ccttggcaag
                                                                     1260
gaatgccccc ttacccagga atggaacaac ctccacacca tccttactat cagcaccatg
                                                                     1320
etecacetee teaageteat ecceettact caggacatea tecagtacea catgaageaa
                                                                     1380
gatacagaga taaacgagta catgattatg atatgagggt ggatgatttc cttcgtcgca
                                                                     1440
cacaagetgt tgtcagtggc cggagaagta gaccccgtga aagagaccgg gaacgagagc
                                                                     1500
                                                                     1560
gagacegeee tagagataac agacgagaca gagagegaga tagaggaegt gatagagaaa
gagaaagaga gcgattatgt gatcgagaca gagaccgagg ggagagaggt cgatatagaa
                                                                     1620
                                                                     1680
gataatgggc ttttggaagc actgattgtt taaagataca aaaaatcttg tattttttt
ttgggggggt ttacaagtag taaatttatt ttcagctgtc tgcctatgaa gttcattgtg
                                                                     1740
tagaaggatt tattatgacc ccctttgttc caagcatgca gtatcataag aactggaaaa
                                                                     1800
actcaaatcc gccaaaaatc cacagctgac agttgaattg acacttttat tggggcagaa
                                                                     1860
tggaacagtc caagaatgta gatactgatt ctttctccat aaatgttctt atagtgtgtt
                                                                     1920
catcctagag ttatttttt gtttgttttt ttcctttttg gatcttgatt gataactgcc
                                                                     1980
atgatatttt getttgatgt gtttetaeat gtagttgeae aeggtteagt aaaaataatg
                                                                     2040
ctgctatcga gtatgcaaat attgaagtat gatggtttga ctgtatggca gtgttgtagc
                                                                     2100
agectettgt tttttteece attgeetett tttttaaaaa aettataaag teaettttta
                                                                     2160
tttttcctca gtcttcaatg acgagagcaa tattaagaag acattgctat ctaattttta
                                                                     2220
atctttttaa atgaaaaatt cctatgttca gtagcgtggt tgatgctatt gtttagcctt
                                                                     2280
cccctccaaa ttgtatacat tggcttggaa tgttcacaac ttgcgtgcgt ggcagcggaa
                                                                     2340
gacgattccc atattctaca ttgctactgt tttgtataaa ataaattggt aaagattgac
                                                                    . 2400
ggttaaaaaa aaaa
                                                                     2414
```

```
<210> 5470
<211> 421
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc_feature

<222> (5)...(303) <223> similar to gill09915 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5470
ggccgatgac tgtaccccc tgaaaaccat caccaaattt tataaccacc ccttgcactt
                                                                       60
tgttttcaat gacaccaagt tggacgctat gctggaagaa tttaagaaag gtaaatctca
                                                                      120
cctggctatc gtgcagcggg taaacaatga gggagaaggg gatccatttt atgaagttct
                                                                      180
gggaatcgtc accttagaag atgtgattga agaaatcatc aaatctgaga ttcttgatga
                                                                      240
aacagattta tacactgaca acagaacgaa aaagaaagtg gctcaccggg aacgaaagca
                                                                      300
agatttttct gcctttaagc agacagacag tgagatgaag gttaaaatat caccacagct
                                                                      360
cctcctgggc catgcaccgt ttcctaggca acagaagtag aagcatttag cccatcccag
                                                                      420
                                                                      421
```

```
<210> 5471
<211> 1139
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(912)
<223> similar to gi4240305 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5471 acticttacgt caagetaagg acgeggeacg cagegettta ttgatgatgt egtttetget gteetgttgt ccagetatgg ccagteagea gegatgeeeg getttgeagg agecatgtea 120 ctagccgggg cccaaggcag cctgtggtct gtggaaggag gcaataagct ggtttgttcc 180 ggtttgctga agctcaccaa ggccaatgtg atccatgcca cagtgacctc tgtgaccctg 240 cacagcacag aggggaaagc cctgtaccag gtggcgtatg agaatgaggt aggcaacagc 300 tetgaettet atgaeategt ggteategee acceeetge acetggaeaa cageageage 360 aacttaacct ttgcaggett ccaccegee attgatgacg tgcaggete tttccagee 420 acceptestet cettesteca essetacete aactestect acttessttt cecasaceet 480 aagettttee cetttgecaa cateettace acagatttee ceagettett etgeactetg 540 gacaacatet gecetgteaa catetetgee agetteegge gaaageagee eeaggaggea 600 gctgtttggc gagtccagtc ccccaagccc ctctttcgga cccagctaaa gaccctgttc 660 egitectatt acteagigea gaeagetgag tggeaggeee atececteta tggeteeege 720 cccacgetee egaggtttge actecatgae eagetettet aceteaatge eetggagtgg 780 geggecaget cegtggaggt gatggeegtg getgecaaga atgtggeett getggettae 840 aacegetggt accaggacet agacaagatt gatcaaaaag atttgatgca caaggtcaag 900 actgaactgt gagggeteta gggagageet gggaaettte atececeaet gaagatggat 960 cateceacag cageecagga etgaataage catgetegee caecaggett etttetgace 1020 cctcatgtat caagcatctc caggtgacct actgtctgcc tatattaagg gtccacacgg 1080 cggctgctgc ttttttttaa gggggaaagt aagaaaagag aaggaaatcc aagccaqta

```
<210> 5472
<211> 1786
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1782)...(1562)
<223> similar to gi511965 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5472
ttttttttt ttgaaaatga acaaaataaa gctttatttg aactccctcc cctacagatc
                                                                       60
attcagatgc ccgggaccat gtccaggttc ctctcagcaa catggaaagc taagccattt
                                                                      120
cacaaacgca caactgtagc tacactacag ccccccatgc ccagggcaca gctttgttgc
                                                                      180
taageetgta acaaaagaee aceaeteagt atttgtgtae eetgeageea acaeeaeete
                                                                      240
etgggettea caggtteact cacceaagag gecageacaa ceaegaeega gtgggtaete
                                                                      300
agtggcccag acacccccg aacactggca ctgccacaag gccctgaagg gtagactgtg
                                                                      360
gggcaaagag gacaaactet cecteeecta agggaceegg etcaetggge etcetteeee
                                                                      420
tgccaaccgc cagccctgc atgcctagca gggaggtaag cacccactgg cgtcgtgatt
                                                                      480
tccattatct tgctaatgtt gacagcacct aagtcacatt aaaacaaaga gagactggat
                                                                      540
ccagacetee aagteteate attggacete agtggttete actgeeceaa ecacagagtg
                                                                      600
aaggtcaggc agcgtttgcc aggatttggc tctgaccaag ttagtgctct aacaagtcac
                                                                      660
ctgagtttct aatagcttcc ctgaagaacc caactatttg gagtatgttg cctctcctat
                                                                      720
caagaggcat ctgggggcac aaaaatcttt ctggatcaca gcttgaagaa acagaacata
                                                                      780
actggagtag cttcagaact aaggcggcca cattcacccc accgcttagg agttagctcc
                                                                      840
attatacaca accaagcaca ggagaaacac tcaccaggaa aagatgccgg aggcttggaa
                                                                      900
gttctcaagg gaactgttta gacagaggta caaacatctc caattcagac ttccaaatac
                                                                      960
actaacaata attaaaaatg tggcctctga tcctcatgtt tcctcaccag tagaggcaaa
                                                                     1020
aaaggagatt ttcataacta catgttaaaa agaacatgtt caagtaaatc cacactac
                                                                     1080
atgtgagtgt tgcatgctgt tcttccacaa tataaaagta taaaaataag atttctgacc
                                                                     1140
tttgtatcta gácagatctg gagaaaacac ggttgctact agctaactag ctctgtgtta
                                                                     1200
tetgageagg egegetatee eagggeetea eetteetgtg etggeteaag agggeagagg
                                                                     1260
aatggagatg gcaatgcctt ttcattccag gaaaccaaac tcagatggca gaaccagccc
                                                                     1320
tagccatgtc gcatagcctc tccatgggtg acactcctgg gacctccaat ggatgggaga
                                                                     1380
aagggetete ageceagett caegtgaggg eggtgtgggt catgtgtggg gtgggggetg
                                                                     1440
ettetgggae gtaggaagae gecaacetea ggggtaeett etgggaagga caagecaggg
cttgggtgcc cgcccatccc aagagcccca caaggtgcca gctcacttag cagcagcctg
                                                                     1560
cttgtccttg cacttctggt agacactcag gatctctgcg atgatgctgg ggtcctccaa
                                                                     1620
ggtggtagtg teteceaget cetgggeete actagtgatg atetteetea ggageegeeg
                                                                     1680
catgacette ceagacetgg tttttggaag aegttteace accaggatet cateaggeae
                                                                     1740
agcatatttg gcgatcttgg tggccaccat ggacttgagc tgcacc
                                                                     1786
```

```
<210> 5473
<211> 641
<212> DNA
```

```
<220>
<221> misc_feature
<222> (643)...(290)
<223> similar to gi3451335 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5473
attacgccaa gcttggcacg aggctactgc cctcactgga cttggggggt ctggaccttt
                                                                60
ggcccctgcc ccctggggga cccagacctc tgggccctca cttctggccc ttacagagat
                                                               120
ccaggcatcc aacaccccca tecetgeeca agegtetgag gtgttagtgg tggggggaga
                                                               180
agcecaccat eccagactet ggtaaatgte titgetggtt cettgeaget ggeagtgggg
                                                               240
300
cctctttcct cttgtgtccg tcgctgccat tgaggaaggc ttctcttgct tctccctgtt
                                                               360
catecaagee actggetteg tgggteagat aggaaceett etgeegtace gageaceaga
                                                                420
ccatgcccac tagcacacat atgatcagaa acaccagcag cgccaggatg ccgcccacaa
                                                                480
tggcataggg aaccgacgtc tgagcctcta ccaccgcacc agggtcgtag accacaagta
                                                                540
cgtagagege cetegeatgg cegtgettat tggaegeete geaagtgtag gtgeegttat
                                                               600
ccgcggatac cagacccggg agcgtgagcc gctctcccac g
                                                               641
```

```
<210> 5474
<211> 485
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (33)...(212)
<223> similar to gi4469185 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5474
gaagcatcat cacgccaagc ttggcacgag gcgactgtga gcagagcccc acatcctcgc
                                                                      60
geacgtette cetgggetet ggeggeeeg actgegeeat cacaqteaaq aqeeetqqqa
                                                                     120
gggagccggg gcgtgaccac ctcaacgggg tggccatgaa tgtgcgcact gggagcgccc
                                                                     180
aggocgatgg ctccgactct gagaaaccgt gaggcaagcc cgtcacccca cacaggctgc
                                                                     240
ggcatcaccc tcagaccttg gagcccaagg ggccactgcc cttgaagtgg agtgggccca
                                                                     300
gagtgtggcg gtccccatgg tggcagccc ccgactgatc atccagacac aaaggtcttg
                                                                     360
gttctcccag gagctcaggg cctgtcagac ctggtgacaa gtgccaaagg ccacaggcat
                                                                     420
gagggaggcg tggaccactg ggccagcacc gctgagtcct aagactgcag tcaaagccag
                                                                     480
aactg
                                                                      485
```

```
<211> 1281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(482)
<223> similar to gi4589566 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5475
tggaaagacc tttagccgtg gttatcatct tattctccat cacagaattc atactggtga
                                                                       60
aaaaccttac gaatgtaagg aatgctggaa agcctttagt cgctactcac aacttatttc
                                                                      120
acatcagagt attcatattg gtgttaagcc ctatgactgt aaggaatgcg ggaaggcctt
                                                                      180
cagactactt tcacaactca cacagcatca gagtattcat attggtgaga aaccttataa
                                                                      240
atgtaaggaa tgtggcaagg cctttagatt gcgccaaaaa cttactctac atcaqaqcat
                                                                      300
tcatactggc gaaaaaccct ttgagtgtaa ggaatgtagg aaggccttta gacttaattc
                                                                      360
atcoottatt caacatotga gaattoatto tggtgagaaa cootatgaat gtaaggaatg
                                                                      420
taagaaggcc tttaggcaac attcacacct tactcatcat ctgaaaattc ataatgtaaa
                                                                      480
aatctaagaa agtettttea aettetgtgt tatagaacat tetatgaatg tagtaattaa
                                                                      540
totattttgc tocatacatg caactgogtt ggcattagag gttttatacc attaaaagag
                                                                      600
tgtgacaatg tattgtagtc catcatcact caaacctgaa acttcagcat atttgttcta
                                                                      660
aaaactaatc ctgttataag aatgagaaag acatttaccg tcatccctat cccatcactt
                                                                      720
tgtgtcatac tggacaagac gcttaactgc tctgtgctat aattttttaa tttatgacat
                                                                      780
ggtcatataa gagtgcagca gtttgacaca ctttcaatca agaggtggaa ccctacatcc
                                                                      840
ctctgttgta tacaggaatc tacatccctc tgtgaactct tggccccaqt aqaatatqqt
                                                                      900
agacgtaact gctgtgctgg tttcttgact cagactttac tqqtaqqqtt acttcacctc
                                                                      960
atggaaatga cagaactgtc ttggttacaa agtctggcta ctttgctgaa gagaccacat
                                                                     1020
gaagaggeee tgaaaactae gtagagaggg agaggeaeet getgaaeeet gtettettga
                                                                     1080
catccaccaa gataccagac atttgagtga aattttggat ccaccagacc agccaccagc
                                                                     1140
taaatgccag tgagcgactt ggtaacctga actgatgcca tgtagaatgg aagaattgac
                                                                     1200
cagctgagcc cctggcccaa atttctgacc cacaaaaaca tgagatataa taaaatggtt
                                                                     1260
gttgttttaa gccactaaaa a
                                                                     1281
```

```
<210> 5476
<211> 1638
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (298)
<223> similar to gi4091819 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5476
cgctgggagg gtacccgctt ctcggaggtg caggccctgc cctcccgggg ctcgctggcc
```

```
ctgcagccct tccttgtggg tggccgccgc tacctggcac tgggcagtga tttctccttc
                                                                      120
acccagatet accagtggga tgagggacga cagaagtttg tacggtteca ggagetgget
                                                                      180
gtgcaggete etegggeett etgetacatg cetgetgggg acgeccaget acteetggee
                                                                      240
cccagcttca agggacagac gctggtgtat agacacattg tggtggatct cagtgcctag
                                                                      300
ggggtgccga ggcctctggt ctcctcaggg tggccactgg aggatgggtg ggggcctctg
                                                                      360
tgagcaccac gtatgcctgt gtgaagacaa gcgaccaacc tgcattcatg cccttgtatc
                                                                      420
cgcacacgcc cagtgtgtac aggcgcaccc cgtggactgg cccaggagga cgtgcatcat
                                                                      480
cactgcaatc agcatgaaca ccaggcaccc ctgggacacc taacgcccag ttcccgtgac
                                                                      540
cccaactgca ggcccccct actctgcagc ctttcccatg ctctgccccc tgtctcatgc
                                                                      600
                                                                      660
acgagtggtg cggggtgctg ggagcgaggg gggccgcatc ctcctgtcct tgtgcttctc
cttctgcccc tctggtcttt cctgttggtg ctccaggcat tgtttacctg ctcttgctcc
                                                                      720
                                                                      780
cegetgtage ceacagecat atetgteatg etteceeggg gecacteace cetgeeceae
                                                                      840
cocgtotgca tgotcacatg gacgoggacg gacacactca ttacacactc acacgocccg
                                                                      900
actgcacccg gtgtccatct ataaacatgt cagggcacgt gtgcatacaa gcagattcag
cactgeetac caggetetec tgttacettg cetetetget tggaggggg cecetetget
                                                                      960
cacccccage gtgcccccc eggaactgat aaggatgaga atggtggtgc cagettetga
                                                                     1020
gggcctgctt ggcctcctgg gggcaaagcc cctctgcccg aagcaataac aacagcagca
                                                                     1080
gaagcaatcc cggggagctg ccaggggtgt ctgtctctgt tctccttggc gtttccttca
                                                                     1140
tggccgtgaa tcccagctca cccatggaca gaagacctcc cctcatctga aagcctttct
                                                                     1200
geetteette etgtagetgt egetttetea ggettggaet gteeeetggt teaecetgte
                                                                     1260
tttgggatgt ggcccttgag ctgggcgggc tccttgggtg gattagagag ctggccgagc
                                                                     1320
tgcaagcacc tgagttacct gcgagggtgc ccagagtgga gcttggcctg agggcgtgtt
                                                                     1380
gcagccctgg ccccaccagt ccacagaggc ccccaggagc actgcctttc agtggaccgg
                                                                     1440
gtgggggctg gtgggagggg ccccactagc tgagcttctg ctgccctctg ctgtctgctg
                                                                     1500
agatgccagg ctagtggaga gggcacacca tgtgcccaaa tggtgtgatg ctccttgtag-
                                                                     1560
caggatacca gggtactggg gggcaatgct atgattaact tgcttcaaat aaaaagttcc
                                                                     1620
cgcccataa aaaaaaaa
                                                                    1638
```

```
<210> 5477
<211> 3042
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (3043)
<223> similar to gi5689549 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5477
catcaaatga attgtcacaa tactcgaata atgcaagaca cagaaaagga tgataacaat
                                                                       60
aatgacgaat atgacaatta cgatgaactg gtggccaagt cattgttaaa cctcggcaaa
                                                                      120
atcgctgagg atgcagccta ccgggccagg actgagtcag aaatgaacag caatacctcc
                                                                      180
aatagtetgg aagacgatag tgacaaaaac gaaaacetgg gteggaaaag tgagttgagt
                                                                      240
ttagacttag acagtgatgt tgttagagaa acagtggact cccttaaact attagcccaa
                                                                      300
ggacacggtg ttgtgctctc agaaaacatg aatgacagaa attatgcaga cagcatgtcg
                                                                      360
cagcaagaca gtagaaatat gaattacgtc atgttgggga agcccatgaa caacggactc
                                                                      420
atggaaaaga tggtggagga gagcgatgag gaggtgtgtc tgagcagtct ggagtgtttg
                                                                      480
aggaatcagt gcttcgacct ggccaggaag ctcagtgaga ccaacccgca ggagaggaat
                                                                      540
cegcageaga acatgaacat cegtcageat gteeggeeag aagaggaett cecaggaagg
                                                                      600
```

```
acgccggaca gaaactactc ggacatgctg aacctcatgc ggctggagga gcagttgagc
                                                                      660
                                                                      720
ccccggtcga gagtgtttgc cagctgtgcg aaggaggatg ggtgtcatga gcgggacgac
                                                                      780
gataccacct ctgtgaactc ggacaggtct gaagaggtgt tcgacatgac caaggggaac
ctgaccctgc tggagaaagc catcgctttg gaaacggaaa gagcaaaggc catgagggag
                                                                      840
aagatggcca tggaagctgg gaggagggac aatatgaggt catatgagga ccagtctccg
                                                                      900
agacaacttt ccggggagga cagaaagcct aaatccagtg acagccatgt caaaaagcca
                                                                      960
tactatgatc cctcaagaac agaaaagaaa gagagcaagt gtccaacccc cgggtgtgat
                                                                     1020
ggaaccggcc acgtaactgg gctgtaccca catcaccgca gcctgtccgg atgcccgcac
                                                                     1080
aaagataggg teeeteeaga aateettgee atgeatgaaa gtgteeteaa gtgeeeeaet
                                                                     1140
cegggetgea eggggegegg geatgteaac ageaacagga acteceaceg aageetetee
                                                                     1200
ggatgcccga tcgctgcagc agagaaactg gccaaggcac aggaaaagca ccagagctgc
                                                                     1260
gacgtgtcca agtccagcca ggcctcggac cgcgtgctca ggccaatgtg ctttgtgaag
                                                                     1320
cagetggaga tteeteagta tggetacaga aacaatgtee ceacaactae geegegttee
                                                                     1380
aacctggcca aggagctcga gaaatattcc aagacctcgt ttgaatacaa cagttacgac
                                                                     1440
aaccatactt atggcaageg agccataget cecaaggtge aaaccaggga tatateecee
                                                                     1500
aaaggatatg atgatgegaa geggtaetge aaggaeeeea geeeeageag cageageaee
                                                                     1560
agcagetacg egeceageag cageageaac etgagetgeg gegggggeag cagegeeage
                                                                     1620
agcacgtgca gcaagagcag cttcgactac acgcacgaca tggaggcggc ccacatggcg
                                                                     1680
gecacegeca tecteaacet gtecaegege tgeegegaga tgeegeagaa eetgageace
                                                                     1740
aagccgcagg acctgtgcgc cacgcggaac cctgacatgg aggtggatga gaacgggacc
                                                                     1800
etggacetea geatgaacaa geagaggeeg egggacaget getgeeecat eetgaceeet
                                                                     1860
ctggagccca tgtcccccca gcaacaggca gtgatgaaca accggtgttt ccagctgggc
                                                                     1920
gagggcgact gctgggactt gcccgtagac tacaccaaaa tgaaaccccg gaggatagac
                                                                     1980
gaggacgagt ccaaagacat tactccagaa gacttggacc cattccagga ggctctagaa
                                                                     2040
gaaagacggt atcccgggga ggtgaccatc ccaagtccca aacccaagta ccctcagtgc
                                                                     2100
aaggagagca aaaaggactt aataactetg tetggetgee eeetggegga caaaageatt
                                                                     2160
cgaagtatgc tggccaccag ctcccaagaa ctcaagtgcc ccacgcctgg ctgtgatggt
                                                                     2220
tetggacata teaceggeaa ttatgettet categgagee titeaggitg eecaagagea
                                                                     2280
aagaaaagtg gtatcaggat agcacagagc aaagaagata aagaagatca agaacccatc
                                                                     2340
aggtgtccgg tccccgggtg cgacggccag ggccacatca ctggqaaqta cqcqtcccat
                                                                     2400
egeagegeet eegggtgeee ettggeggee aagaggeaga aagaegggta eetgaatgge
                                                                     2460
teccagttet cetggaagte ggteaagaeg gaaggeatgt cetgeeceae geeagggtge
                                                                     2520
gacggetcag gecacgtcag eggeagette etcacacac geagettgte aggatgeeeg
                                                                     2580
agagccacgt cagcgatgaa gaaggcaaag ctttctggag agcagatgct gaccatcaaa
                                                                     2640
cagcgggcca gcaacggtat agaaaatgat gaagaaatca aacagttaga tgaagaaatc
                                                                     2700
aaggagctaa atgaatccaa ttcccagatg gaagccgata tgattaaact cagaactcag
                                                                     2760
attaccacga tggagagcaa cctgaagacc atcgaagagg agaacaaagt gattgagcag
                                                                     2820
cagaacgagt ctctcctcca cgagctggcg aacctgagcc agtctctgat ccacagcctg
                                                                     2880
gctaacatcc agctgccgca catggatcca atcaatgaac aaaattttga tgcttacgtg
                                                                     2940
actactttga cggaaatgta tacaaatcaa gatcgttatc agagtccaga aaataaagcc
                                                                     3000
ctactggaaa atataaagca ggctgtgaga ggaattcagg tc
                                                                     3042
```

```
<210> 5478
<211> 2048
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (367)...(807)
<223> similar to gi3417289 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5478
ctacgateat teegecaage ttggcaegag geegtaggeg eteeegggeg etggeggegg
                                                                       60
cggaggagag ggagcagcgt cacgggcgcc cggcccgtta aaacgctgct ggctggagcc
                                                                      120
acctccctcc ctgcagcccg caacgggaat ggagtaaagg gagacccgtc gacctggcca
                                                                      180
cggggatcag cgatggaatt aaagcaatct ttgtccaccc atctggaagc cgagaagcct
                                                                      240
ctgaggcgct atggggcggt ggaggagacg gcttggaaaa cggagagact ggggagaaat
                                                                      300
cagctggaca tcatctccat ggcggagaca accatgatgc cagaggagat tgagctggag
                                                                      360
atggcaaaaa ttcagcgtct ccgggaagtc ttggtccgcc gggagtctga gctcaggttc
                                                                      420
atgatggatg acatccagct ctgcaaggac atcatggact tgaagcagga gctgcagaac
                                                                      480
ttggtcgcca tcccagaaaa agaaaaaacc aaactgcaga agcagagaga ggatqaqcta
                                                                      540
atccagaaga tccacaaact ggtgcagaag agagacttcc tggtggacga tgcggaggtc
                                                                      600
gagcggttaa gggagcaaga agaagacaag gaaatggctg atttcctgag aatcaagtta
                                                                      660
aaacctctag acaaagtaac caaatctcca gccagctccc gggcagagaa gaaagcagag
                                                                      720
ccccaccta gcaagcccac ggtggccaag acggggctgg cactgatcaa ggattgttgc
                                                                      780
ggggccaccc agtgcaacat catgtagccc ccacgtgggg tgccctgggc catggggacc
                                                                      840
eccecceace etettgtett tatageecee attteacegg ggeecaagag etetecaagg
                                                                      900
cagaaggggt tgaaggcaag cccgtgactg tcaccagagg ccatgggcac ggcaggcggg
                                                                      960
cctggccacc ctgtacagag tgtagcagta gggagtctct caccgtcgca tggtcctccc
                                                                     1020
cagageatge egaacecagg agtetgtete actgtttate caaacaceag gaaaggteet
                                                                     1080
ccctcaaaaa agcatatete cacttetete tagetgtate taacccaceg tgtgaatgaa
                                                                     1140
ctgggagagg ggcatgctcc ccagctgtgt gtagtcgtga cttctcaaca atctagcacc
                                                                     1200
atgteggaea egiteeeeat eeaceeteet agetetgete teagagetag geacatggge
                                                                     1260
acaggtcccc tcccgtctgt cctctcccag caactgtgcc ctggagggct ccacatggcc
                                                                     1320
cccgtgtctc tcgggcacca cccatatagc agtcccagag ggcccatctg taaagatcga
                                                                     1380
gettgtgtgt ggtgtegtgg teacatetee egetteeeee cateetgtgt etgggeaeag
                                                                     1440
ttcacatcag gacagegtee attgtgetet cagtetgeet caggtgtgtg cetggagggg
                                                                     1500
geotggactg geatggatee agtgtgeaga agageeagea gggaacegga agetetgatg
                                                                     1560
tcaaggccag agcagttgag aatgggaccc agagtagatg ctgacctggg cactccacca
                                                                     1620
ttccggggcc accacagaga tgccagcagg atgccacttt gccagcccga cacacggacc
                                                                     1680
tttgtaaaga acagcaacag gcaggagagg cagcgtgtga ccagattgtg tcccgtcatt
                                                                     1740
gggtggcata tgttaactag ctgccaaaca acttcaaccc gtgtaattca tgtacatttg
                                                                     1800
caacagccag cccggtacag cctgtgtgac ttctctgtat gtgtgtgtgt gtcgtgacca
                                                                     1860
gcctaagtag ttagcataac tcaagatgct gatgtgcagt cacccatcag agaaaataaa
                                                                     1920
aatggaaacc acgttcacag cattttaaaa gtttttactt tttttcttga ttatggaagt
                                                                     1980
aatccatgta catagtaaat cattttaaaa gtacaaaaag tatgaagaag tttgtcttaa
                                                                     2040
aaaaaaa
                                                                     2048
```

```
<210> 5479
<211> 1465
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(1402)
<223> similar to gi3510639 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5479
ggatagageg cattgaagac accagacetg etggatgtge agageageta gtteacaata
                                                                       60
accteceaac caccagtgte atcatgtget ttgtggatga agtgtggtee acteteetga
                                                                      120
gatetgttea cagtgteate aategetete etceacacet cateaaggag attetgetgg
                                                                      180
tagatgactt cagcaccaaa gactatctaa aagataattt ggataaatac atgtcccagt
                                                                      240
ttccaaaagt tcggattctt cgcctcaaag agagacatgg cttaataagg gccaggctgg
                                                                      300
caggagcaca gaatgcaaca ggtgatgtgt tgacattttt agattctcat gtggaatgta
                                                                      360
                                                                      420
acgttggttg gttggaacct cttctggaaa gagtttattt aagtagaaag aaagtggcct
gtccagtaat cgaagtcatc aatgataagg atatgagtta catgacagtg gataactttc
                                                                      480
aaagaggcat ctttgtgtgg cccatgaact ttggttggag aacaattcct ccagatgtca
                                                                      540
ttgcaaaaaa cagaattaaa gaaactgata caataaggtg ccctgtcatg gctggtggat
                                                                      600
tgttttctat tgacaaaagt tacttttttg aacttggaac atacgaccct ggccttgatg
                                                                      660
tttggggtgg ggaaaatatg gagctctcat tcaaggtgtg gatgtgtggt ggtgaaattg
                                                                      720
agateattee etgeteeega gtgggeeata tatteagaaa tgacaateea tatteettee
                                                                      780
ccaaagaccg gatgaagaca gtggagcgga acttggtgcg ggttgccgag gtctggctgg
                                                                      840
atgagtataa ggagetgtte tatggeeatg gagaceaeet categaeeaa gggetagatg
                                                                      900
ttggcaacct cacccagcaa agggagctgc gaaagaaact gaagtgcaaa agtttcaaat
                                                                      960
ggtacttgga gaatgtettt eetgacttaa gggeteecat tgtgagaget agtggtgtge
                                                                     1020
ttattaatgt ggctttgggt aaatgcattt ccattgaaaa cactacagtc attctggaag
                                                                     1080
actgcgatgg gagcaaagag cttcaacaat ttaattacac ctggttaaga cttattaaat
                                                                     1140
gtggagaatg gtgtatagcc cccatccctg ataaaggagc cgtaaggctg cacccttgtg
                                                                     1200
ataacagaaa caaagggcta aaatggctgc ataaatcaac atcagtcttt catccagaac
                                                                     1260
tggtgaatca cattgttttt gaaaacaatc agcaattatt atgcttggaa ggaaattttt
                                                                     1320
ctcaaaagat cctgaaagta gctgcctgtg acccagtgaa gccatatcaa aagtggaaat
                                                                     1380
ttgaaaaata ttatgaagcc tgaagtgtaa ctgatgtttt tatatagtaa acccattaaa
                                                                     1440
tactgtgaaa ataaccctga aaaaa
                                                                     1465
```

```
<210> 5480
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (127)...(214)
<223> similar to gill72146 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<210> 5481
<211> 6845
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (6595)...(5150)
<223> similar to gi2337952 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5481
acgaataaag cacacaactt tattcacgaa gttgtgagta tgacagtgat gcagagtata
                                                                       60
tgacaaagga gtgcagtgag tgctgctggc aacaggagcg gggagcaggt agggatcaca
                                                                      120
ggcacagcag cgcggagccg gcagggccac ctcctcctct acacacaagc atgtggcact
                                                                      180
tagegegeea acacacacet geteagttte acagggaaca egacacaget ttteaaaagg
                                                                      240
aattottota aacatttgot ttoatattto caaaagggga gggagggcag gaagaaccac
                                                                      300
acgeetteca acattigaaa aaatteeata aacceaactt aaaateaaag aacteagaga
                                                                      360
getteaatge ggagteatea geaactegea ggaaccacae acatgattgg acaagtetgt
                                                                      420
acataaaacc ccaaaagaac atcagttttg tggacaatgg tttcctctgc tgtaaagaaa
                                                                     480
cgtatgcata tatgatcagt aagcagctca catctttctg aatgtcaagg tctacaggat
                                                                      540
tgtctctgtc cacctttggt caatgggttc aggaagtgac tcatgggaac tgcactctta
                                                                      600
ggagaaacac ttttgggaat aattttattg aataacaacc accactcaat tacactaaqc
                                                                      660.
ttcagaaatt gttggatttg tttaattttg ctgtgtacct atacattgtt tagaaagttt
                                                                      720
cttttggctt aaactgacca tttcccccct tctttttgag ttttccatga ttaaacttgc
                                                                      780
ccaaataaaa acataacaat ccatatgcaa agcatatctg ccaccacctc ccactgcttc
                                                                      840
ctgggccgca aacagaaaaa taaacagtga ttaaaaaaaa tgccaaagtg aaggtttctc
                                                                      900
tttcttctat cacaacatag ttgggtagtt cccttaaagt acatcattgc tataagttgg
                                                                      960
tatcactgca aatctcaagt cccaaataat ctctttttct ggatagaaag ttattcaaaa
                                                                     1020
gggagcacaa aagagcaagc tttggggcat actgacaaac acttcattgg ttagaagaga
                                                                     1080
ataattttaa aaatcaaata aaattgaggo tggcatagga agtacagatt aaatacaggt
                                                                     1140
taaatagcta ccagaaacac agaagaggtg gttaataaaa actgagattg cttcagagga
                                                                     1200
cacaggaggg ttgatgagac agtctatttt ccttccacca tcttccatga gagtcaggaa
                                                                     1260
aagggttetg tgagcaccca acctggagcg gtcacctgtc tettecatac acaggaggat
                                                                     1320
gctaagaccc agttagcttt aaatggtttt tagaaagact tacctagtca aaagtggtta
                                                                     1380
atttgaactt ttcaaacttg caaaagcata tacatttgat atcatcatct gagaagcaat
                                                                     1440
tottagaaaa aaatgtttgc ttcaatgtct aaagaaatcc agtgaaagtt ttagaaacat
                                                                     1500
tgccagctag acgtctccga gttagagttg attgatatac tggattggga tggagaggat
                                                                     1560
gagaactgaa aaagaactgc tccagcctct gcctcagaag aggaaactca gcttggagat
                                                                     1620
gacagaattg ggtagcggag tagatgctag agcccatgac agatagaaaa ctacccccat
                                                                     1680
ttaaaaaaaa acaacaactc attaactcta tctctttgag gttttggaga acaggaagtt
                                                                     1740
tatgtgaagt tattgaacac gtcatattaa gaacatttca taactaaccc caaaccaaaa
                                                                     1800
tgtagatgca tagctagctg tgcaagtttc ccaatgctct tcctatctcc taataagtca
                                                                     1860
cacagaaaga ctatgtgata gcctggattt tcttgaagaa attttaaaag aactgatttt
                                                                     1920
cctatcatca ttgaggcccc ttttacttca tgccatcagt atgcacttaa gagtcccaag
                                                                     1980
gaagtcaaat gttcccaaat gtagcccttt acatcggcac cagggaagcc tgccatatat
                                                                     2040
acaatcccct tectagggtg aacaagetee accagtttga gtgtgttaat aactggaatt
                                                                     ,2100
ttcatgtata gtacagggta gggtaaaagc agaccaatag ccatcttgtg tgctgtgacc
                                                                     2160
aggatggaca ttttgaggac aagcatgctg agcccagttt aactaaatgc gcaggcattc
                                                                     2220
tagcccacac attcaatctg gcagttagca ggaaccaggt tgccccacaa cccatccctc
                                                                     2280
cagctggagc cttttgctgg gaaatggagt agggggccca ctctgcatta tggtttccaa
                                                                     2340
tgacccctcc ccagagcaga gcactactct gcttgcagat aggaggctac tggtgctttc
                                                                     2400
```

tggcaatgca tttctgcaag gtgcagttta aatgaactca tatggtactt gatatggaaa 2460 gaagettttt ttetteteaa gttggatgea gaactgagtt taaaagatae aaggaaagea 2520 gggtttcatt agtgggagct gatttagggt tcagttcttt atcactgcaa tcttaggcag 2580 geceettaac teetagtete tataaaataa ggaagggggt tgteecagtt tteagtetaa 2640 tgtccccatt ctatgacaga cccatgtctt ctttatgtag accaaggaag aggaatttta 2700 gcaaaactac ctgattatgc ccatgtttcc caaatacctt gatttttctt atattgacat 2760 ttcatctgca catgtctggg tgataattca ttaatcaatg taaaacgtag ggacccttta 2820 ttagctccat aatgaaaaaa atctctccac cagccaagtg ctgggaccca ggtggccacc 2880 attgttattg acaggtaagg aagcactgga aatgcaccat cctctccatc cccacacttt 2940 ccagagtaaa gcaaggatga ggacacccag gcattgtgcc aaggctgcca ttgcaggagg 3000 gcacagagag aggatgggat agaaaaagca tggaataagc aagaggccac tgagacacca 3060 aaggetaaac tgeaaactge agtgtggett ceaaceaage aagagetggt eteatetget 3120 catggccacc ctgtcagagc catttgctaa acatgttagt agatccaaca cacacacaca 3180 cacacacaca cacacacaca cacacacaca cacacgagag tagtectcat tcagtgcata 3240 gcaatggaag gctaggacaa tttagattcc ttaggtaaga gcacaggagg atgctataga 3300 acagtgactg ttcattccac cccccaaatg acagcagtga gccacgtgtc agaggctgca 3360 acacagactc agaaactatt ctacttgctt ttttaccact ggtgtcagag agacagcttg 3420 taatcctaat atttggtgcc agcaggaaga acttcagagc ttttgttctt agtggcatat 3480 gaaggtaaat tcaaatgttt tcttcttcgg ctttaaaaca gagcttaaat tcttaagcac 3540 agecccaaag catgataata aagtggetta eeeteetggg tgtggagtta cacaaactet 3600 ccctcatcta actcacgtcg ggaatcatga tgtggtttca tatgcacgca cgtgttgggg 3660 aaaccctagg ctcatattcg aatctagtgt tgcagagcct gagggactct cgtgagatgc 3720 tetgacetee acateceace teateettee tetgtggtte ceagtetgat cettecatga 3780 gctacatcag cgccaacacc tttccatgaa ggaagtgatg ttggggtcgc agtttagcct 3840 cactettgat etttgagtea cacacteg gtgacaatgt etttagaage tgcaacacag 3900 caggacaaac attcaagcag aaattaaaaa gcacatgcat gctcacaaaa ttactctggg 3960 tgagtgaaac caacatgtgc acacacacce atgaattega cagagetggg caagaagaaa 4020 gctgaaaagg ccaaattaaa tacgttcgaa ggagtctact ttggagttgc agagatttaa 4080 aagagaaaaa catgtctttc cttagcctat tattgaaaga aaccttaaaa accaacaaca 4140 gcatgggctt gatctgattc ataggatgcc agagagacag cagaggataa cgactggaaq 4200 aactagagtc agtaggacat gggacttgtt tttgtttttt gctttttggt tttttttggc 4260 catgaatgat atggccccta cacaaaatca cctaatggca tgccactggg ccaatctggg 4320 ggcaattigt gittitiett teitigeaaa ggiggagete cagacagete eigieetagg 4380 cggggagcag gaaccagacc tgctatggga agcagaaaga gttaagggaa ggtttccttt 4440 catteetgtt cettetett tgettttgaa cagtttttaa atatactaat agetaagtea 4500 tttgccagcc aggtcccggt gaacagtaga gaacaaggag cttgctaaga attaattttg 4560 ctgtttttca ccccattcaa acagagctgc cctgttccct gatggagttc cattcctgcc 4620 agggcacggc tgagtaacac gaagccattc aagaaaggcg ggtgtgaaat cactgccacc 4680 ccatggacag acccctcact cttccttctt agccgcagcg ctacataata aatatattta 4740 tactttgaaa ttatgataac cgatttttcc catgcggcat cctaagggca cttgccagct 4800 cttatccgga cagtcagcac tgttgttgga taagagataa aggaaaagaa aaagaagaaa 4860 acaacgcagc tcctgttgta tacataaggt aatgtgaaaa ggtcacatgt ggacactact 4920 4980 ctgtgtttcg gaacatagaa atttctacgc catgcttctt ggcaagtgtt actgttgqct ggcccgacat ttgactcatg gtgttttaac cagactttct ctttttggtg ttgctgagcg 5040 acggtagttt gcaaattctc caatcaagtt tgggcctcaa tatgacatcc tatggggcac 5100 cgccactggt cagtcctttc tctaattggc cattcacgag tgggacttag aagagttttg 5160 cttttttctt catgtcgttg cgtctccaaa gaggtaacct gtcaaactcc tgtatggaca 5220 ttccaaagat ttcccgaaac acttcagggg ctaagtggcg ctccagcctg gttctgtcca 5280 cetetetgag gattttgttt egecetetgt tggteaceat gageatttea tatggaaata 5340 tetttggtte caacatgttg ggcatagaca etecteggte catteteatt geaggeatgt 5400 ggccatctgg gagtgtctgg taatctcgca ctcccccgct gacatcccca tagctgttat 5460 actgagcgaa gtcggtagaa acaggccggt gaagcccatt tcttccatag ccagggagag 5520 atgcagtttt agatgatgga atatgtgaag ctgagttgat gggagaatcg tagcgactgg 5580 ctaacagaga tgacctttcc eggetetett tetecatete ttetttcaag atcaactgte 5640 ccaggcctga gttaagcttc attaattgct cttcttgaag ctgccgacgt ctcagaagtt 5700 ceteateate treetetetg ceactagate tgegttteat greaggteet acgacageaa 5760 atgaggggg accaggccag tggtccgtct caatctttgg tgtctcgctg gggtctggtg 5820

```
5880
cctqqqctqc tgggaacttq gaaaacttga tgatatcttc tgaggacttg ctctgggctg
ccaaggcagc atgctgtttg tagatgggtg gctttcggta aatgttgatt ccttgatctg
                                                                     5940
gaacatggaa atgtttaggg gcctgagcgt aagttggagt tagagggcgg ctgtctggcc
                                                                     6000
ggtaagggag aggggagttc cggccgctgg acggctcatt gccaggtctg tggaaatgct
                                                                     6060
ggggagageg ggaegtggtt ggagtgtage tgtggegget gtacacaggg gagttgatgg
                                                                     6120
agecetgget egtggacega tggateatee gateeegaae ateetggtae cettetgetg
                                                                     6180
atggagtagg agacaaagtc ctcggagact ctccaaggct ctgtctctcc tgtttgtcat
                                                                     6240
catagecega agtgtagaaa ggeteatagg taataagate tggaegttea atgteataaa
                                                                     6300
ttgccttgac cttcggaatg gctgctaaat ccttgtaatc caggatctca ttgtctactt
                                                                     6360
ttgcatagat agtatgacct ggtgagccag gaatactgga gcctggccta gaataaatac
                                                                     6420
tttccgagga tgtcctggta ggccgcagct tttcctcggt cttcgtagat tgcttacagt
                                                                     6480
cgggatgcca aacggtggag cettgaagat acattteete teettetgtg aacatetggt
                                                                     6540
tgcatctgct gcatcgtgca cagctggggt ggtaatgttt gtcacctgcc tcaggccagg
                                                                     6600
gttccttttc ttctaattct gttccttggc tgtgctgagc agagaactcc tccaqqcttc
                                                                     6660
aagttcagaa cacggccaag aggctttgta gatgccagac ctcagcccga cagactgagg
                                                                     6720
ctcccacctg cctgggttac atatcaggct tctctccgaa gctcggctaa ggcaacgtgc
                                                                     6780
atccctctag agacgcactc cggaaaccag ccccgtgtgc ggcgggcagg cacgctcctc
                                                                     6840
                                                                     6845
gtgcc
```

```
<210> 5482
<211> 1477
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1478)...(496)
<223> similar to gi3880930 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5482
tttttttttt ttctattcat cttattttac tttctaagga attgatagaa atataaatgt
                                                                       60
acatatacet aaaaagtgag etateetaca tatgacagae cagaatttae taacteeata
                                                                      120
ggttttctgg atatttcaag cacacattaa aacaattaca gagaggacat acatttatga
                                                                      180
tttatgcaaa ttaaggcaca tcaattacaa tctattttt taagttagtc agtttaaaaa
                                                                      240
tetteaetta caaaaattea aaatatgtee aageteaaet ttttagtagg aatgttaatt
                                                                      300
tgttgggttt ggccattttc ttttttcacc ttaaaggtca aacatqaaac aatqaqqaat
                                                                      360
gtaggtettt gtaaaacaca taaatacetg tgatgttttg aateatttgg ceettaaaaa
                                                                      420
tattgettaa caagttaaac ccagettaat tgtaggtaaa tgcaagtata eccaaggetg
                                                                     480
gactatttta gtctgctttt ggctgcagat tgtacttctg tggctggaaa aaatgttctt
                                                                      540
caatagcact gaccagttca ttcagttcct tcttcagctg ctcaggatca ctgttcccag
                                                                      600
gtggggcaca cagctctgca tagtacttga ttttgggctc tgtcccactg gtgcgcatgg
                                                                      660
tggccacgcc tccattagca aaggtgaagg tgatcatttg gctgctttta ctagtgggaa
                                                                      720
gaacagettt tttateaggt tggetateat catagecagt tgtaaggtee etaatggeag
                                                                      780
aaatttcaaa tttgccacaa gcttttggat aattattttt tccatcgtag tttctgaggt
                                                                      840
tttcaaataa tttcttaatg gtttcttgat catggcagat aaaataggaa gctttagtaa
                                                                      900
tatggtagcc atactccaca taaatggcct ttagttgctg agacaaagac aaattcttgg
                                                                      960
ttgctaggaa gctagccaac tctgcactta tgacagcggc actgactcca tctttgtcca
                                                                     1020
gaacaaaagg gcagcacatg tatccaatag cttcttcaaa tgcaaataaa acagttttcc
                                                                     1080
ectggtetat tagetgtttg getetgttte ceatceactt aaagecagtt aatgttteet
                                                                     1140
```

```
caaaatgaaa accttccttt aaggcaatgg cccgcaagat tttggaggag acggtgctgg 1200 acaacatgta cgtgtctttg agagcactgc gatcctggtt cttctctttc caagatgtaa 1260 aaagccacca gcccaggagg gcccccaact cattgcctga aaacaccctc cattcaccac 1320 tgtcttgctt ttctgccaca gcaagtctat cagcatccgg gtcgttagct aaaacaattc 1380 tggccttggt tttgtcagcc aaagcaaaag acaaagtcaa gacacctttc ccctcttcgg 1440 gattcgggta tttcactgtt ggaaactcag gatccgg
```

```
<210> 5483
<211> 2150
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2028)...(1258)
<223> similar to gi220637 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5483 tttotggtaa otoaaaatgt ttaottataa ttgaggttaa tttottaact otttatgoaa 60 tataatgtac caaatttaga agccaagtga tttctagtat gcattaagtt tatatctaga 120 aaattettte tggaatteag tatttatttt aaaaagtgea taacaggagt aagagagget 180 taccaaaata tttcaaaact caagtacatt ttcctcatct ccaatatttt agaacggaat 240 aaaacataaa ctgaatcaaa ttttgaaact gtctttgaca agataaaaac accaaatatc 300 tacttaaaat tcattttgaa aatacaatct cagataactc aaaccaaaag tgctgaccat 360 tggttttctc cagaatactc agttctaaat gaacaaaaat ttatatgcac ttttctagat 420 tttgagaaac atttttgttt cattagaaaa gttatttcta acaatatatt aataqaqaaa 480 tagcacaatt ettatteage geetaaattt ttaegagega aaatatgaaa ttttattttt 540 atgcatagtt tatgtattga tecatgggge ttacaaatag caacacacte ttgggetgat 600 actategtgg attitgetta aattatgagg geaggaaaat titaaaatee caeaggteae 660 aactgaatca cattaactgg ctgatttagt aaatgaaggg caattctaaa atgcaaaata 720 aaaatggaat taaggcagct ttaaaagaaa ataaaactca tccacccaaa atagtgctac 780 ataattoatt acttaaaaag ctototgtgg agtatagaca taaagccaaa aataaaaaca 840 aacattgcag ttgtgatgca gcatcaggtg cttttacttc agtgaatgaa aaataatggt 900 cacaactcaa atgaatggga atttaatatg aatatatgca ccttaccaga gatgtttgct 960 accaatgata tottagcaat tocatattoo ttacaaagto agtataattg ttgtaaaaaa 1020 atcaactgtg gttetgaata eccatteaca gttgacetea acaatgtate tgatgtagga 1080 gactgagtat ccgtgacagg cagaagcatg tgatggtcct cagtcccaag tggaagagct 1140 aatggtaaag tcatatcaga aggcttcaca tccatagttt ctgataaagg acttttttgt 1200 atggaateet gtteacteaa agtatgatee tetgeactgg agtetagagt tttatetgea 1260 ccagaatgga cttttgtttt gtgcttcttt aaatttttaa tatctgtgta agaatttcca 1320 cataattcgc agataaatgg tettteteet gtatgggacc gaaagtgttt gttgagetet 1380 cctgaggaaa taaaactttt cccacaaata ccacatatgt atggtttttc acctgtatgt 1440 tttcgagaat gagtgataag agaactagag acagcaaatg ccttcccaca ggtatcacat 1500 acataagget ttteteeagt atgeetaegg acatgatagg teagtgtget ggettgagea 1560 aatctctgtc cacacctatc acagacatat ggcttctctc cactatgctt ccttgcatga 1620 atcttgagat tgctagaagt tgcaaactgt aagttgcata catcacattt atagggtttt 1680 tetteaceat gatgeatgeg actatggaag actagetgae atttetgage aaateettta 1740 teacacaatt cacattigta iggettetea ceigtaigag itettacaig egitticage 1800 tggttacatt gggtaaatgc ctttccacat aagtggcaga cgtaaggttt gactccttta 1860

```
tgtattctca tgtgccttct caaactgctg gcttctgaaa acactttccc acatgtgtta 1920 cacattggct tggccttgga atacctctga tccagctctt ccccggagtt ctccgcctca 1980 taaggactct tgacgctggc tatattagac atagagtgtt ctttcagagc acagtttggc 2040 tgtgattttc cacgtttccg tttcactgta acagtgtgca caatatcttg tgctggaaaa 2100 gtattttcca caactgatgt caactcgagt tctgaattat catttataag 2150
```

```
<210> 5484
<211> 1760
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1762)...(1496)
<223> similar to gi3327164 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5484
gttgttcaat taagaaacat ttattctttt ctaaatgaaa gtgaaattgc agttgtaagt
                                                                       60
atgaacttaa gaaacattgg tittacaaga taactagcta tatgaccatg accttaaggt
                                                                      120
gtgatatggt ttggctctgt gtctccaccc aaatatcttg tatctcccat tattccatgt
                                                                      180
tgtgggaggg gcctggtggg aaataattta atcacggggg caggtctttc ccatgctgtt
                                                                      240
ctogtgatag taagootcat gagatotgat ggttttaaaa atgggagttt cootgcacaa
                                                                      300
getetetete ettgtetget gecatecatg taagatgtga ettgeteete tttgeettee
                                                                      360
accatgattg tgaggcctcc ttagtcatgt ggaactgtaa gtccattaaa cctctttctt
                                                                      420
ttgtaaattg cccaatctca ggtatgtctt tatcagcagc atgaaaatgg actaatacaa
                                                                      480
ggtgctagac aaggtgatta aaggctctat aaattctaaa ttgtgcaatt ctaagacatt
                                                                      540
cttggcattt tacatgtcta gatgactgcc atctttttt taatattttt ccctcacatg
                                                                      600
ttccagtcta ttctcattac agaagaatac gtttaacata cagttacaga aacagaggtt
                                                                      660
ttaaataaat atttaaaagt aacttcaaaa tatatttgca ctgaaatatg gaggcaaaat
                                                                      720
tgtttctgag tcaggaaaca tttattcttc cccataaatt taaatggagg tgaaactgtg
                                                                      780
aatatgaagc aaagaacatt tateteacaa ggtaaetetg aattetttta attetgaaae
                                                                      840
cagagacatg tacaacactt acagcattca cacaacacta ttttcaaaat aggtttttga
                                                                      900
cccctaaaaa tgaaaattet tagtgacaag etttagatat gaaaettage eeagtgggta
                                                                      960
ttcactttgt cacaaaaagc aactacagac aaatagtttt tccctctccc cgacacaaaa
                                                                     1020
actgaaatta cagactttta aagcagaaaa aattttctcc aaaatgcaaa tgattaaggt
                                                                     1080
ccaaggaaca aatgaacaga agateteaat tatteaattq aqeqaqtqat ttaqtttqea
                                                                     1140
tattaactcc ttttcttact acttcctgat atctgattct ggcaatattt atcttgtatc
                                                                     1200
tactgggcaa gacactggga acacaaagaa attttagaca aggtccagtg gtatgctggt
                                                                     1260
aaaggtttaa caactagctc ttaagggaaa ggtaggtctt cacttatagc atttctatgg
                                                                     1320
tgtaaatact ccaattgccg cagatttcaa gctagcaaca atttgacaac tgtctcacaa
                                                                     1380
aatteeteaa aetaaegatt gteaeteata agaeattaea ageeagetee aacaeeeae
                                                                     1440
egtacagtet ceacetteaa gtagtteata atetetteat gggtacettg tateagatet
                                                                     1500
tgggcaactg ccggctgggg tgaccaggga attettetgg tagcaaaacg tggagtetge
                                                                     1560
acgttggaca tgtcccctgt tgcatcaacc atggtctaat gcactgagca tggaatttgt
                                                                     1620
gagcgcaagg caaaactgaa agattttctg gagacagatt ctcatgacag atcacacaag
                                                                     1680
getettette tteetettee teatetggat taetggetee tteecatgtg geaggaceet
                                                                     1740
gtgaagtgag tggcctccag
                                                                     1760
```

```
<210> 5485
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (397)...(71)

<223> similar to gi48676 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5485 cgcggtatct ccgcagcct gagaagctca tcaagaggat aaaactgcct tagctcgttg 60 agtactttca cttttcgtg ggatgagcta aggctttcag cttttttaga tacataagcc 120 gcgtttcaag aaatcgaact tgcctttcaa gatcctcaat gcgtcggtct tttgacagct 180 ccaatgctga tgccgcttt tctggatcaa ctgatattgc aatgtttctt ttggtgccaa 240 tcttgagcgc gcgtaaacca gcttctccgc gctcttcata gaccttcagc cacctggcta 300 cagaaccact accagcaagc ataaagtgag cagcagcctg attaagggac atgtgctgct 360 cgatcacagc tttcacgacc ttaatacgca actct 395

```
<210> 5486
<211> 540
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(150)
<223> similar to gi4062479 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5486 aaggcgggag tgcggcaatg agcggcgaag cggcgtttta cggcctgcaa ccggtagata 60 gegatetgea egegtttget geacateagt egttgttgaa ggeetaegaa aagetgeage 120 gcgccaaagc agcattctgg gcaaaataaa atcaaatagc ctacgcaatg taggcttaat 180 gattagtetg agttatatta eggggegttt ttttaatgee eegetttaea tatatttgea 240 ttaataaaat aattgtaatt ataaggttaa atatcggtaa tttgtattta ataaatacga 300 tegatattgt tactttatte geetgatget eeettttaat taaetgtttt ageggaggat 360 gcggaaaaaa ttcaactcat ttgttaattt ttaaaattta tttttatttg gataatcaaa 420 tatttactcc gtatttgcat aaaaaccatg cgagttacgg gcctataagc caggcgagat 480 atgatetata teaatttete atetataatg etttgttagt atetegtege egaettaata 540

```
<210> 5487
<211> 718
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(477)
<223> similar to gi1552811 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5487 gatggtgaat aaaaacateg cegatagett cetgecegea ttaageaaac aaatggegga 60 aageggegtg acattacaeg cagatgeage tgeactggeg cagttgeagg caggeeetge 120 gaaggtggtt gctgttaaag ccgaagagta tgacgatgag tttctgtcat taqatttgaa 180 egteaaaate gteagegate ttgaegatge categeecat attegtgaac aeggeacaca 240 acacteegat gegateetga eeegegatat gegeaaegee eagegttttg ttaaegaagt 300 ggattegtee getgtttaeg ttaacgeete taegegtttt acegaeggeg gecagtttgg 360 tctgggtgcg gaagtggcgg taagcacaca aaaactccac gcgcgtggcc caatggggct 420 ggaagcactg accacttaca agtggatcgg cattggtgat tacaccattc gtgcgtaaat 480 aaaaccgggt gatgcaaaag tagccatttg attcacaagg ccattgacgc atcgcccggt 540 tagttttaac ettgtecace gtgattcaeg ttegtgaaca tgteetttea gggeegatat 600 ageteagttg gtagageage geattegtaa tgegaaggtg gtaggttaga etattatgat 660 gggcaccate taagateata tetgtteegt aagateteeg ggtegegaca tagaattg 718

```
<210> 5488
<211> 461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (460)...(359)
<223> similar to gil651274 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5488
ctacgaattc aatgtccgta cccgtacatc gtatagaatg gacttgccct gaccttacct
                                                                       60
aagttacatt gattgegget aaatgtaaag atattgetgg tttattgttt gtttttgega
                                                                      120
gatgcgccgc accattccga agcaaaattc ttaaaatgca ctcttttagt gctaccgctg
                                                                      180
gattactgtg gtgcaactag gttgtactga tgctgtttca gggtttgcct tgtataacaa
                                                                      240
agcaatagat gtgccaaagt tggataggag aatattgtta tccggataat gcactgatgc
                                                                      300
cgcatccggt gagcgtgccg aaatatggga tgtattccgg cacgataaga agggattatt
                                                                      360
tacgtcgctg acgcagactc atcaacacag cagcaaaacc aaacaatgcc gtcagcaccc
                                                                      420
acageggeca gttgeeggta egtgegtatg gtgtgattte g
                                                                      461
```

```
<210> 5489
<211> 429
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)...(371)
<223> similar to gi148183 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>	5489					
tatgaccacg	attacggatt	cgatgtccgt	acccgtacat	cgtcccgact	gtaaccaccc	60
tgagattacc	ctgctgaaga	cgcttctggt	caaccagact	aatccggtcg	atctctcatc	120
gctgcatcag	caaaatgccg	taccgccgcg	cgtcgcaaaa	caactctgcc	gtttactacg	180
cctggccatc	atttttgcca	gccgtcgccg	tgacgatctc	gtgccagaga	tgacattaca	240
ggctaaccat	gaactgttga	ccttgacgct	tccgcaaggt	tggctaaccc	aacatccgct	300
gggtaaagag	attattgctc	aggaaagcca	gtggcagagc	tatgtccact	ggccgctgga	360
agtgcattaa	tgagtaagtg	ccggatgcga	tgctgacgca	tcttttccgg	ccttgattat	420
ttccctcgg					•	429

```
<210> 5490
<211> 537
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(356)
<223> similar to gi1742763 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5490
tgacagacat agtcagaaca gttatcgcgg cttattgaaa atcatgccga cggcaaccaa
                                                                       60
tgcgcgcaat ttcactcagt gcgactcaat gctgattggc gctaattgtg gggcgcatac
                                                                      120
cttcccgtat gttgagtgtc gtaacaatag tgcgcaactg gaacacgagg caacgacatc
                                                                      180
acgtattggt gaagatcaac tgttttactg cctgcaacgc gggatcagcg aagaagacgc
                                                                      240
catctcgatg attgttaacg gtttctgcaa agacgtgttc tcggagctgc cgttggaatt
                                                                      300
tgccgttgaa gcacaaaaac tcctcgccat cagtcttgaa cacagcgtcg gataaqgaat
                                                                      360
aaacatgtta agtattaaag atttacacgt cagcgtggaa gataaagcta teetgegegg
                                                                      420
attaageete gaegtteate eeggegaagt teaegeeatt atggggeeaa aeggtteggg
                                                                      480
caaaagtacc ttatcggcaa cgcttgccgg gcgagaagat tatgaagtga ctgtccg
                                                                      537
```

```
<210> 5491
     <211> 471
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(357)
     <223> similar to gi2367273 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5491
tgctgcgtcg tccggaaatg acttatgaaa aattaaccac gctgacgccg tttgcccctg
                                                                       60
cgttgacaga cgaacaggcg gcggaacagg ttgagattca ggttaaatac gaaggttata
                                                                      120
tegegegeca geaagatgag ategaaaage agetgegtaa egagaacace etgetaceeg
                                                                      180
cgacactgga ttaccgccag gtatccggtc tttctaacga agtgatcgcc aaacttaacg
                                                                      240
atcacaaacc agectetate ggecaagett egegtattte tggegteacg eetgeggeca
                                                                      300
tetecattet getggtgtgg etgaaaaaae agggtatget gegtegtage geataaegea
                                                                      360
ttaaaaatgc ctggtaagca cccgcttacc aggcaacgca tcaagaacag gtaatcactg
                                                                      420
tgctccacga cctctcagtt gtgtatcaaa cacgcaggta tctctctcgc c
                                                                      471
     <210> 5492
     <211> 444
     <212> DNA
     <213> Homo sapiens
    ,<220>
    , <221> misc feature
     <222> (25)...(316)
     <223> similar to gi4062503 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5492
ttactaattc catgtegegt eceggagate agececactg taagggeggt egegggatea
                                                                       60
atgegegteg geteegggae ggegetggtg ggegatggte etaeggtege tgegegaate
                                                                      120
aacgaatatg ccgcgcttgg catcgacagt tttgtgcttt cgggctatcc gcatctggaa
                                                                      180
```

240

300

360

420

444

gaagegtate gggttggega gttgetgtte¹eegettetgg atgtegeeat eeeggaaatt

ecccageege ageegetgaa teegeaagge gaagggtgg egaatgattt tateeccegt

aaagtcgcgc aaagctaagg aagaaataat ggcaacgcca gtgaagaagt ggttattgcg

egttgeeece tggtttttae eggtgggeat egtggeggtg tggeaactgg geteeteggt.

tggctggctg tcgacgcgta tttt

```
<210> 5493
<211> 469
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(241)
<223> similar to gi405858 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400>	5493					
cgctggtggt	tggctggaat	attcaggata	ccacccgtct	gtggctggag	ggctggattg	60
ccagtcaaca	aggatggcgc	attgatgtcc	tcgcccactc	gctcaatcaa	ctacgccctg	120
aactattcga	aggccgtaca	ttgctggtgt	ggtgcggtga	aaatcgaacc	tccgcccaac	180
agcagcaact	caccagttgg	caagaacaag	gccatgatat	tttcccactc	ggcatttaat	240
gattcgttaa	caaatgcgct	ttactgtaca	atcctttcgt	taacataagg	agtgcattat	300
gcgcatagct	aaaattgggg	tcatcgccct	gttcctgttt	atggcgttag	gcggaattgg	360
tggcaacatg	ctcgcaggtt	atacctttat	ttggcgtgca	aggtaagtga	gtgcggcaac	420
ctctatgatc	atcccgttcg	cgatgatgtg	agcgcctaac	ataaatgcg		469

```
<210> 5494

<211> 563

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (565)...(197)

<223> similar to gi537108 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5494
ctgtggatcc atcccttcgg caaatccgac gacggcagct accagaacga gggcaataaa
                                                                       60
geogttaact ttaaageega teateaggat aagaageage gegacgeetg eegcaataat
gattaatggc atagtettta tetettatta gtgccagaaa agcagegett tegegetgca
                                                                      180
cgtagggggg ctgttaaaca gccactaaca tgccgccatc aacaaacaac aggtggccgt
                                                                      240
ttacgaaatc agaggetttt gaagaaagga acacegeage accaateagt teetgeggat
                                                                      300
ctccccageg tgcggcgggg gtccgtttgc acaaccagge ggtgaagget tcgtcctcaa
                                                                      360
ccagtgcttt agtcatttct gitttgaaat agcccggcgc aataccgttg acctgaatat
                                                                      420
tgtggcgcgc cagctcgacg cacatgccgc gggtgagcat ttttaccgcc cctttcgatg
                                                                      480
cggcataagg ggtgatggtg tcacgtccca gttcgctttg catcgagcaa atattaataa
                                                                      540
ctttccctgc cttgcgttca acc
                                                                      563
```

```
<210> 5495
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (536)...(150)
<223> similar to gi405852 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5495 · gattacgaat tecatgteeg taccegtaca teteegggae tgggaeatte etgaggttac 60 ccaaactgat ctcatcgcaa ccgacattgc ttaacgccgt cagggcctgc ggtgtcagtt 120 ctaataattc cggacgtagt gaattcatga ctgaagattc tccgcaagcc atgatqccag 180 etegeeegge gteatggegg etatttgtge geegacatta accagegeet gggeegtate 240 geggteatag caaggtgttg eggtgetate gagegetgee agteceagea etttgatgee 300 getetggaca caetttttea eetgatgegt eagtaatgat gatgaacece ettegtaaaa 360 ategeteaeg aggataatga egetittege tggttgttea ataagttgee gaecataete 420 cacggcactg gcgatattgg tcccgccgcc caactgtact ttcattaata actctaccgg 480 atoggoaacg totgoogtga gatoaacgao gottgtgtoa aacgooacca gat 533

```
<210> 5496
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (391)...(83)
<223> similar to gi4062233 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5496
gcattcagcg cgacgattcc aggccgctac ccgttcttgt cgttgagatt gttcaatttt 60
ctgcgtcatt ttgattgcct tattcttcgc ggatgccgga aagttctgca cgggagagca 120
ccagacgggc gcgatcgata accggaccgt ccaccatctt gccgttcagg gaaaccacgc 180
cgaggccttc gcgagcggcg gcttcagcgg cttctacgac gcggcgggcg tgatccactt 240
ctttctgggt cggggcgtat aggatgtgca gcagatcaat ctgacgcggg ttgatccactt 300
atttgccgtc aaagcccagc tgtttgatgt gggcggcttt ttgcacaaat ccgggttcgt 360
tgttagcggc ggaattgacc cgattgaaa
```

```
<210> 5497
<211> 590
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (592)...(92)
<223> similar to gi3041757 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5497 gaactgatta agagatccat aggtgaagaa gaaaaacggg gccagcaaca ataaccagcc 60 agggccttgt agcaatacgt tecgaegtte agttateaeg acgeaeegee ategaaaeeg 120 taaaaatacc ccactcatca atccgttgtg tgcatttatc aaatccggca tcacgcacga 180 gtgaateeat eteceettge gaacgeaege geattaceea eggtttacea tetttatgae 240 tgggtaacac cccggcaatc atctccagtt gagggtgcca cggctgcccg gtgtagatga 300 gaatgeegee eggttegatg geattggeaa gaeetgegag tgagtttttt acetgeteat 360 tttcgggaaa aagetcatac aggccagaga caatcgccag cgtaggccgc ggagttaacg 420 cgctgagttc ctccgggtta aacgcatcgc cctgttcaaa acgcacccgc ccagacattc 480 cccgttgage aatcatetet tgcccctgtg caacatttaa ctcgctgtaa tcacgtaaca 540 aaatateget taeggeagge tegtttgeea gegeateeag taeatagege 590

```
<210> 5498
<211> 567
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(346)
<223> similar to gi987639 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5498
aagtaggaca cgattacgaa ttctaggtcc gtacccggac atcggctatt atgcatttac
                                                                       60
tacgccggtg cacgactcaa tttactcctg gcggaagatg agatgctgcg agtgggcgga
                                                                      120
aaagtgetgg egattaeegg etttaeteeg aatgeeetge aacagegtge tteteattge
                                                                      180
ctgtatacca ttgccgaaga acaagcgaca aacagtgett caatetetge ttgtcacget
                                                                      240
cagggaatgt taacggattt gctgttcatt gcgctgattc agcaggatct ggaactggca
                                                                      300
ccagaacgta ttcgtcatag tgaagcgctg gtgaaaaaac tggtctgagt aaagaatqcq
                                                                      360
cgtataatgc ccgcccggtt tgtgttgttt tgagagtttc cttatggcgt tgttaatcac
                                                                      420
taaaaaatgc atcaattgtg atatgtgtga acccgaatgc ccgaatgagg cgatttcaat
                                                                      480
```

gggagatcat atctacgaga ttaacagcga taagtgtacc gaatgcgtag ggcactacga 540 gacaccaacc tgccagaagg tgtgccc 567 <210> 5499 <211> 336 <212> DNA <213> Homo sapiens <220> <221> misc feature <222> (12)...(285) <223> similar to gi882573 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5499 cttgtaaaac agttatgacc atgactacga atttcatgtc gcgacccgga gatcgtctgg 60. actataacaa acatactgat atccgcggtá ctactgtcgt tggcgaacgt attctggaca 120 gccagagcgg cgaagtaact ttaggtactc cggtagtaat tacgttcaac aataccaaca 180 gctatcagga actgaatttc aaagctcgta tggaatcccc aagcaaagat gccacccgg 240 gcaacgttta cgctcaggct gactacaaga ttgcttacga gtaatcgcat ttggccgggt 300 tegeceggee acateattaa eggattaatg ataagt 336 <210> 5500 <211> 375 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (3)...(312) <223> similar to gi1789617 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5500 ccctggcgat gaccgactgc tcaacgccgg aagacggcct ggcatgccaa aagctgggag 60 ccgaaattat tggcactacg ctttctggct ataccacgcc tgaaacgcca gaagagccgg 120 atctggcgct ggtgaaaacg ttgagcgacg ccggatgtcg ggtaattcca gaagggcgtt 180 acaacacgcc tgctcaggcg gcggatgcga tgcgccacgg cgcgtgggcg gtgacggtcg 240 gttctgcaat cacgcgtctt gagcacattt gtcagtggta caacacagcg atgaaaaagg 300 cggtgctatg accacactgg cgattgatat cggcggtact aaacttgccg ccgcgctgat 360

375

tggcgctgac gggca

```
<210> 5501
<211> 846
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (831)...(504)
<223> similar to gi4062221 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5501 tttagttcgg acgttattga ctatattaat tggttgttca aggcctctga gatttttctc 60 aagatggtga tgcagattta accetgttgt cgtcggcgcg atacettttc ctgagcgaat 120 gaataaaggg tcattaaatt gcgcacgtaa gcgttgtaac gactggctca cggctgatgg 180 ggtgatatat agtgattcag cagetttget aatgettaaa tgetggtaaa tacaetcaaa 240 tatgacaaga agatttaagt cgaacttttt caagtcgtag agattggcca tacactactc 300 cggttatatt tttcttccat gatatattca cttaatcaat gttttttgcg tatatatttt 360 tattgattat gattttttgc ttaactcagg attaagtttt tctaaaatag cacagccact 420 tatggcagag cgagcaattc atgctttttt aggatggttg aaaagcaggg atatagttca 480 accatecatg aattacettt tatttattee ceataatgat attaagegtt ttetgategg 540 gcaaccccac ggcctgttgt agcgtatttt ccttactcat gtaatagata gccggcgtga 600 catttgcccc cagatcgtcc atcagtttat cattgtcact taacactttc atttgctctg 660 tacttacgtt tgcaggcacg tttagcttaa gcttgccacc agaggcttca tattgttgcc 720 aggittitige gggatettig gaggeaagaa tigeegetge igtegeeggg ettietgget 780 tgatagecce agecageaat gttgttaatt geaetttgte agagtetgee egeaagaegg 840 accgga 846

```
<210> 5502
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(295)
<223> similar to gi1789468 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5502

ggattcggta gtgcgtgcca aaaaggtttt tggtgaaaac catatcacca ttatctcgca 60
agaatttcat aatcaacgcg ccatctggct ggcaaaacag tacggcatcg acgctatcgg 120
ttttaacgcg ccagacctca atatgaagca cggttttat actcaactgc gggagaaact cgctcgtgtc agcgccgtga ttgacgccaa aatcctccat cgccagccga aatatctcgg 240
```

```
gccttcggtc atgattgggc cgtttagtga gcatggctgt ccggcgcaga aataatgcgt
                                                                      300
atctgcgcac gtcgaagatg aaaaaggcgt gctacattgc cgacagaatc cct
                                                                      353
     <210> 5503
     <211> 637
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(437)
     <223> similar to gi1651350 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5503
aaagacattg gegegetgga ggaagtgtgg ggeagtageg tgatgaatee gtggetgeeg
                                                                       60
aaagagcaac aaagtagcat tetgaaagtg aeggtgettg agcateatee geattaegeg
                                                                      120
atgaccgcgc tggcgctggg cgatcagcat ttgtgggtca ataagctgga cgaaccgctg
                                                                      180
caagetgege taegtateeg catteagget teegatgttt etetggtttt acaacegeeg
                                                                      240
cagcaaacca gcattcgtaa cgtattgcgg gcaaaagttg ttaatagtta tgacgacaac
                                                                      300
ggccaggtgg aagtggaact ggaagtcggc ggtaaaacgc tgtgggcgcg tatcagcccg
                                                                      360
tgggccaggg atgaactggc gatcaaacct ggcctgtggc tgtacgcgca aattaaaagt
                                                                      420
gtgtcgataa ccgcctgatt aaatcaggtg gctataaatg aactgggcaa tgctgtcggt
                                                                      480
ggtgttatca ccaatcacaa tgttggcgcg cgcttttacc gcgtcatcgg cgttgcccat
                                                                      540
egecaegeet gtaceagegg ettecageat actgatatea ttaaagttat egecgaatge
                                                                      600
cacgacgttt tccatcgacc aaccttgcgc ctcaacc
                                                                      637
     <210> 5504
     <211> 305
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (308) ... (135)
     <223> similar to gi882661 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
   <400> 5504
tgcctacggt tctggcctgg ggacttgtag gcctgataag acgcgtcaag cgtcgcatca
                                                                       60
ggcgctgaat gtcggatgtg gcgtgcggcc tacaaatcaa accaaattca attggttacg
                                                                      120
attatecegt caaagtaatt ttttegetaa egteeagaee eegqtatteg tgqtqqaaaq
                                                                      180
```

240

egecaegaca ecegegitaa tegeattaeg egeatettet teategeaca ecageecaee

	ggttggcgga ttttctctgt cacccagccc agcactttgg gcatacagcc	300
tggca		305
212	5505	
<210>	·	
<211>	,	
<212>		
<213>	Homo sapiens	
	· · · · · · · · · · · · · · · · · · ·	
<220>		
	misc_feature	
	(1)(89)	
	similar to gi216531 in the genepept database release 114,	
Run	with FASTXY 3.3t00, default parameters	
		,
-		
<400>		
	cggcgttcct ctttgccaca gtgccgaacg atacgcatca aaatgtagct	60
atttcgcggc	gaaaaaggag cgcgcaatga agttctggcg acccggtatt accggcaaac	120
tgtttctggc	gattttcgcc acctgcattg tcttgct	157
	taran daran da	
A STATE OF THE STA		
<210>	5506	
<210> <211>	· · · · · · · · · · · · · · · · · · ·	
	404	
<211> <212>	404	
<211> <212>	404 DNA	
<211> <212> <213>	404 DNA Homo sapiens	
<211> <212> <213>	404 DNA	
<211> <212> <213> <220> <221>	404 DNA Homo sapiens	
<211><212><213><220><221><221><222>	404 DNA Homo sapiens misc_feature (406)(47)	
<211><212><213><223><221><221><222><223><	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114,	
<211><212><213><223><221><221><222><223><	404 DNA Homo sapiens misc_feature (406)(47)	
<211><212><213><220><221><221><222><223>	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114,	
<211><212><213><220><221><221><222><223>	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114,	
<211><212><213><220><221><221><222><223>	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114,	
<211><212><213><220><221><221><222><223>	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114, with FASTXY 3.3t00, default parameters	
<211> <212> <213> <220> <221> <222> <223> Run	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114, with FASTXY 3.3t00, default parameters	60
<211> <212> <213> <220> <221> <222> <223> Run <400> catttgggct	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114, with FASTXY 3.3t00, default parameters	60 120
<211> <212> <213> <220> <221> <222> <223> Run <400> catttgggct gacacatcgc	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114, with FASTXY 3.3t00, default parameters 5506 gttcctaagt gcgtcaggcg gtcaagtgta tcatcactca tactctgccc caccgtatct tctatcagac ggcgcgctac ggtgccgggc ggcgggagta	120
<211> <212> <213> <220> <221> <222> <223> Run <400> catttgggct gacacatcgc acggcaaatc	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114, with FASTXY 3.3t00, default parameters 5506 gttcctaagt gcgtcaggcg gtcaagtgta tcatcactca tactctgccc caccgtatct tctatcagac ggcgcgctac ggtgccgggc ggcgggagta gtcatagcga taccagttcg cctcgagcaa ttctttcggg tcgatcacga	
<211> <212> <213> <220> <221> <222> <223> Run <400> catttgggct gacacatcgc acggcaaatc tgtcgccgct	Misc_feature (406)(47) similar to gi396335 in the genepept database release 114, with FASTXY 3.3t00, default parameters 5506 gttcctaagt gcgtcaggcg gtcaagtgta tcatcactca tactctgccc caccgtatct tctatcagac ggcgcgctac ggtgccggc ggcgggagta gtcatagcga taccagttcg cctcgagcaa ttctttcggg tcgatcacga gtcatatcc gccataaacg cggtcattaa agactgagga aacggccacg	120 180 240
<211> <212> <213> <220> <221> <222> <223> Run <a a="" ttgggct<=""> gacacatcgc acggcaaatc tgtcgccgct gctgagaagt	404 DNA Homo sapiens misc_feature (406)(47) similar to gi396335 in the genepept database release 114, with FASTXY 3.3t00, default parameters 5506 gttcctaagt gcgtcaggcg gtcaagtgta tcatcactca tactctgccc caccgtatct tctatcagac ggcgcgctac ggtgccgggc ggcgggagta gtcatagcga taccagttcg cctcgagcaa ttctttcggg tcgatcacga	120 180

```
<210> 5507
<211> 730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(733)
<223> similar to gi41437 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400>	5507			*		
tgtttgaccg	tgaacgcggt	gcttttaccg	gtgccagtgc	ccatggtatc	ggtcgttttg	60
aactggcgga	taaaagctcc	ctgttcctcg	acgaagtggg	cgatatgcca	ctggagttac	. 120
agccgaagtt	gctgcgtgta	ttgcaggaac	aggagtttga	acgtctcggc	agcaacaaaa	180
tcattcagac	ggacgtgcgt	ctaatcgccg	cgactaaccg	tgatctgaaa	aaaatggtcg	240
ccgaccgtga	gttccggaac	gatctctatt	accgcctgaa,	cggattcccg	attcacctgc	300
cgccactacg	cgagcgagcg	gaagatattc	cgctgctggc	gaaagccttt	accttcaaaa	360
ttgcccgtcg,	tctggggcgc	aatatcgaca	gcattcctgc	cgagacgctg	cgcaccttga	420
gcaacatgga	gtggccgggt	aacgtacgcg	aactggaaaa	cgtcattgag	cgcgcggtat	480
tgctaacacg	cggtaacgtg	ctgcagctgt	cattgccaga	tattgtttta	ccggaacctg	540
aaacgccgcc	tgccgcaacg	gttgtcgccc	tggagggcga	agatgaatat	cagttgattg	600
tgcgcgtgct	gaaagaaacc	aacggcgtgg	ttgccgggcc	taaaggcgct	gcgcaacgtc	660
tggggctgaa	acgcacgacc	ctgctgtcac	ggatgaagcg	gctgggaatt	gataaatcgg	720
cattgattag				. · · · · ·		730

```
<210> 5508
<211> 243
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (245)...(131)
<223> similar to gi544485 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>	5508 .				,	
atgtccgtac	ccgtagaacg	taacgaatgg	caggacaatg	gagtgatgct	ataaagctgc	60
cacgatgcgc	acaccgatgg	cttcatcggt	cagcaaaata	ttgccgaccc	ctaagactaa	120
aatacgcatt	acagaacctt	cactgaaacc	acttcgttgc	cgtcagcatc	cactacgtgt	180
accgcacagg	ccatgcacgg	gtcaaaggag	tgaatggtac	gcaccacttc	cagcggttta	240
ttc					•	243

```
<210> 5509
     <211> 352
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (355) . . . (48)
     <223> similar to gi688405 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 5509
accggcgcaa taaacctgca ggatttctat caggccggga ttatttaatc cttcaatccc
                                                                       60
agacgttteg ceageegatg eaggttggeg aegteggttt ceageateeg egegeaggea
                                                                      120
geceagitgt gaigatittg tgecagige tgacgaatag titeaegetg gaacgettet
                                                                      180
gtcgcttcac gcaggttttg cttaacaacg ggcaccgccg ccacttctgg cgtcggcaac
                                                                      240
gtcacctcag gaaaagcaaa atgttgcgcc tcaagaatca cttcatcgcc gctgcgggtg
                                                                     300
getetegeca gaactacege cegatgaata geatgtteca gttegegeae gt
                                                                      352
     <210> 5510
     <211> 214
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (217)...(6)
     <223> similar to gi1565189 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5510
ggttactegt cagegatget tgeeggtgge cagtttteca ggegeatgee cagagacagt
                                                                       60
ccacgggaag ccagcacgtc tttaatctca gtaagagatt ttttaccaag gttaggcgtt
                                                                      120
ttaaggaget caaceteggt acgetgtace agateacega tatagtggat agettetget
                                                                      180
ttaaggcagt tagcagageg gacagtcaat teca
                                                                      214
     <210> 5511
```

<211> 171 <212> DNA

<220>

<213> Homo sapiens

<221> misc feature <222> (3)...(132) <223> similar to gi290405 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5511 caggcgateg cgtagtaata agtgggctgc agaaagtgcg tcctggtgtc caggtaaaag 60 cacaagaagt taccgctgat aataaccagc aagccgcaag cggtgctcag cctgaacagt 120 ccaagtetta acttaaacag gageegttaa gacatgeeta atttetttat e 171 <210> 5512 <211>, 360 <212> DNA <213> Homo sapiens <220> <221> misc feature <222> (1)...(361) $\langle 223 \rangle$ n = a,t,c or g <220> <221> misc feature <222> (3)...(282) <223> similar to gi4062261 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5512 aacaattagt gcaggcctgc caacctacag aagaatcatt aatgccgatt gtgagccgcc -60 ttgatgcaga aaatcgttgt ccactggaag cattaattat tcgtcgatta ttaattcagg 120 cggcgaattt taccgagaag caaactgttg aaccggagcc gcaaccgcag ccaatgcccg 180 ttgacgatgg tgggccaggc tgtctgggca tcattaaaat tattttctat atttttatct 240 ttgctggttt gatagggaaa atactccatc tgttcgggtg acagtcgacg ttaatgtgcg 300 ggaageeegg caagtaatet tteegeattt ttgtaatgtt geeeggegge cagtnttate <210> 5513 <211> 504

<212> DNA

<220>

<213> Homo sapiens

<221> misc_feature <222> (1)...(505) <223> n = a,t,c or g

```
<221> misc feature
     <222> (2)...(290)
     <223> similar to gi145470 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters.
     <400> 5513
aaaccgttcg cacatggctt acaggaagtc gccaagcggg gtcgcgctgg aatgtaaaga
                                                                       60
eggtegtatt tteagtggea getacgetga aaacgeegea tteaaccega etetqeeacc
                                                                      120
gttgcaggga gcgttaattc tgttgaatct caagggttat gattacccgg atatccagcg
                                                                      180
cgcggttctg gcagaaaaag ccgatgcgcc gttgattcag tgggatgcca cctccgcaac
                                                                      240
gctgaaagct ctcggctgtc acagtatcga ccgagtgctt ctcgcttaag cctggtgccg
                                                                      300
gatgeggegt gaacgeettg teeggettge cagecetete etggtqtega aatteeegge
                                                                      360
aaacagtttg ccgtttcttg cgcaaaacca gcgggtaaag tagcctgatg gaaattttcc
                                                                      420
ttagategag teteetgeat gttaaagege gtgtteetea geetgttagt eetgategge
                                                                      480
ttgctgccgt tcnctgtgct nggc
                                                                      504
     <210> 5514
     <211> 372
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(373)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (372)...(250)
     <223> similar to gil707458 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5514
agaaattaac gcgcgatgat gaggcggaaa agtgagaaat aaatggggtc gctaaatgtc
                                                                       60
ccctaaggtt gcgggcaaac gcaaaactgc ctgatgcgct acgcttatca ggcctacacc
                                                                      120
gctcctgcaa tatattgaat tcttgcggtt tcgtaggccg gataaggcgg tcacgccgca
                                                                      180
teeggeatga acaaegegea etttgttage aatetegggg caaetaaatg ttgeeceett
                                                                      240
tegtttttac cetacegetg gegtegggte ategeetttg tagtegegtt ttactteegt
                                                                      300
cacctcatcg cccttctcgt tgtgcagatg cacttcaagc tggttaaagg caatggtgat
                                                                      360
gtcgntttca cg
                                                                      372
```

<220>

```
<210> 5515
<211> 545
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(546)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (545)...(89)
<223> similar to gi1788699 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5515 gtgcgccact gatcgcccac ttccttcagt tcatgggctg gtttgttccg cagctccacc 60 agegeetgge aatatttatt acteattaag eecceaegta atteeetgag agataceaet 120 cttcacctga tgcagcccgc ttactgcttt tccgtaaaca ccgttcacga cgcgccagaa 180 aattgttteg ttetggetgg gagtggettt caeggaatge egecateeac aeegttgeag 240 cacgacggta taageccetg gactecagtt etteegeetg gegggteagg cacaaaatea 300 cccgcgggtc gttagtgccg acatagaaat tgcgcacagg tctggtttca cgaactggtt 360 gtggttccgg atcctgcgct ctctcagtca ggcgcgggaa atgtctgtgt gtatctcctt 420 cacaacggtg agccacacgc ccactctgac gtaacttgct tgctgactgc agaacgcgct 480 gccgtgagta acctgcaaaa gcatccgcaa tgtctcccca agtacagccc cgatgggntt 540 caatg 545

```
<210> 5516
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(226)
<223> similar to gi1742880 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5516

ttggccaacg catttacgcc tgcgcggttc gggtttcgtt aatgccgtcg gacggatcgt 60
cgcagtcttc acgccctatg gcgttgcggc attattaaca cattatgggt cgatcacggg 120
gtttatggta cttggtgtta tgttattgct ctgtgcgctg gttctctcca tttttggcat 180
cgaaacgcgg aaggtgtcgt tggaagagat ttctgaggtg aattaaatct ttcgttgatg 240
gcatcaattg ccagatgtgc cactgacgtg ttttatttgg cctacaatgc cagtacagaa 300
ttgttggcca gcgtaaaatt acccctgtgg ctcttcccag tctggcagcg tat 353
```

```
<210> 5517
<211> 588
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(404)
<223> similar to gi537232 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5517 gaaatcaccg gtaggggcca gcggcttgat gcagattatg cctggtacag cgacccatac 60 ggtgaagatg ttetetatte eeggttatag eagteetggg eaattgetgg ateeggaaae 120 gaatateaac attggcacca gttacctgca atatgtttat cagcagtttg gcaataatcg 180 tattttetee teageagett ataacgeegg accagggegg gtgegaacet ggettggeaa 240 cagegeeggg egtategaeg cagtggeatt tgtegagagt attecattet eegagaegeg 300 cggttatgtg aagaacgtgc tggcttatga cgcttactac cgctatttca tgggggataa 360 accgacgttg atgagcgcca cggaatgggg acgtcgttac tgatccgcac gtttatgata 420 tgctatcgta ctctttagcg agtacaaccg ggggaggcat tttgcttccc ccgctaacaa 480 tggcgacata ttatggccca acaatcaccc tattcagcag cgatggcaga acagcgtcac 540 caggagtggt tacgttttgt cgacctgctt aagaatgcct accaaaac 588

```
<210> 5518
<211> 365
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(184)

<223> similar to gi1773175 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5518 cgaaaatgcc ggcatcgccg cccgctttac gttgggaccg gaagcggtgg tggacaaagt 60 acgccatgct tttattagcg agaagccgaa gatgcgctat ccggtgacgc tggtgacctg 120 ggcggtaatg gtgcttaagc gcctgctgcc ggggcgcgtg atggacaaaa tattgcaggg 180 gtgagttgaa gcgcgcgtt aagccccat gtcaaagaaa atatcgacaa catgagagcg 240 actccatgtc cgtagaaaat attgtcaaca ttaacgaatc taacctgcaa caggttcttg 300 aacagtcgat gaccactccg gtgctgttct atttttgtc tgaacggaac cagcacttgt 360 tgccg

```
<210> 5519
     <211> 578
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(579)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (578)...(399)
     <223> similar to gi42034 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5519
tggggttcag caaccacatg tacctgatag ctatgacggg cattcagggc atcaagtacc
                                                                       60
acctgattga catcggcaaa cgtcagttgg atacccgcgt ctgccagcag tttaccgata
                                                                      120
aagccacgac cgatattacc tgcgccaaaa tgtaatgctt tcatagtatt aaccttcatc
                                                                      180
aatgttttta cccgagaggg ctggggtgag gcttttccct cacccaaacc ctctccgtga
                                                                      240
ggagaggggc agcgccggat gcggcgtaag cgccttatcc ggcctacaag aacgtgcaaa
                                                                      300
ttcaacaaat tgtgatgcat cctgtaggcc tgataagcgt agcgcatcag gcaattaacc
                                                                      360
ccaccttete catgtggaga gggtgggatt ggattactta cgacctgcca gcagttccag
                                                                      420
cacttcatcc acgctggtgg tgtgtgccag acgctcgatg acggactcat catccagtgc
                                                                      480
attggtcagg ctggtgataa cctgaatgtg ctcgttgtta cgggcagcaa taccaatcac
                                                                      540
cagacgggca atgtcatctt cttcttcncc gtagccca
                                                                      578
     <210> 5520
     <211> 370
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(325)
     <223> similar to gi1789518 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5520
atatgeceet tgeccateaa gtgattgagg ageatateae ggteaateea teateaeegg
                                                                       60
cattccgtca tggcaagtcg ttaggctctg ggaaaaataa agactggtca cgggtaaaat
                                                                      120
ttggtgctgg tcgttatcgt ctcttctttc gttatagtga aaaagagaaa gtcatcattc
```

180

```
tgggatggat gaacgatgaa aacactctgc gcacctacgg taaaaaaaaca gatgcctata 240 ccgtattcag caaaatgtta aaaagaggac atcctcctgc cgactgggaa accctcaccc 300 gagaaacaga agaaacccat tgatggtgtt cacaatgccc gccgaacgca ttcgtgttga 360 ccagcgggca 370
```

<210> 5521
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(329)
<223> similar to gi145453 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5521 tatcactgtg atgaactctg ccggaggcaa agcatttgac ctgttcggcg aactgaccgg 60 tatcgcagta ctgctgacta tgctgccgta tttctactct tgcgttgacc tgattcgttt 120 tgaaggcgtt aacatccgca actttgtcag cctgatctgc tctgtactgg gttgcgtgtt 180 ctgcttcatc gcgctgatgg gcgcaagctc cttcgagctg gcaggtacct tcatcgtcag 240 cctgattatc ctgatgttct acgctcgcaa aatgcacgag cgccagagcc actcaatgga 300 taaccacacc gcgtctaacg cacattaatt aaaagtattt tccgaggctc ctcctttcat 360 tttgccccat gtgttgggag gggg 384

<210> 5522
<211> 511
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(171)
<223> similar to gil800067 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5522
actgttgccc attatgcagt tgccagtggc agatattaac gcccagaccg ccattatgca 60
tgacggcaaa gcctcagaag gcgatattca gggacacgtt gatggttgga tcaaagccca 120
ccagcagcag ttcgatggct gggtgaatga ggcgctggca gcgcagaagt aattttatt 180
cgggcggata aggcgttttt gccgcatccg ccgttctgtg cacaatgcct gatgcgacgc 240
tggcgcgtct tatcatgcct acaaaccaca tcgcacattt caacaatcta tctttcatcc 300
catattcatc aacatccgct attattgatt tccagcttaa tcatcacctg atgaacaaaa 360

```
ataatgacta aacctaatca tgagettage ceggegetga tegtgetgat gtetategee
                                                                      420
accggtctgg cggtagccag taactattac gcccagccat tgctcgacac catcgcgcgt
                                                                      480
aacttttccc tttccgccag ttcggcaggt g
                                                                      511
     <210> 5523
     <211> 412
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2)...(261)
     <223> similar to gi1651330 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5523
cagcagtacc gataatccgc cagtgattgt tgaagtgtct ggtattggtc agtacaccgt
                                                                       60
ggtggttgag aaagatcgcc tggagcgttt accaccagag caggtggtgg cggaagtgtc
                                                                      120
cagccgtttc aaggccaacc cgaaaacggt ctttctgatc ggtggcgcaa aagatgtgcc
                                                                      180
ttacgatgaa ataattaaag cactgaactt gttacatagt gegggtgtga aateggttgg
                                                                      240
tttaatgacg cagcctatct aaacatctgc gtttcccttg cttgaaagag agcgggtaac
                                                                      300
aggegaacag tttttggaaa eegagagtqt caaaggeaac egaacaaaac gacaagetea
                                                                      360
agegggegat aattatttea geagtgetge atgteatett atttgeggeg et
                                                                      412
     <210> 5524
     <211> 773
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (22)...(720)
     <223> similar to gi1742424 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5524
catcactgtt cgtcgctgta catcgttcag aatgcgaaaa ccctgctgat acccacctta
                                                                       60
atcgtcttgc ttcacatgat ggacgtgatc cgccatcatc aaccaataag tcgtcgggaa
                                                                      120
gccagagcta aagcgattga cctgctggaa gagatgcaaa tcccggatgc cgtggaagtt
                                                                      180
atgtcgcgct atccgtttga gctttcaggt ggtatgcgcc agcgggtaat gattqcqctq
                                                                      240
gcatteteet gegageegea attgattatt geegaegaac egactaegge getggaegte
                                                                      300
```

360

420

acggtgcagt tgcaggtact gcgtttgctt aaacataaag cccgcgccag tggaactgcg

gttctgttca tcagccatga tatgaccgtg gtgtcgcaac tgtgcgatag cgtatacgtg

```
atgtatgceg gcagcgtaat tgaaagcggc gtgacggcag acgttatcca tcatcccgg 480 catccgtata ccattggttt gctgcaatgc gcaccagaac atggagtccc acgccagcta 540 ttacccgcca ttccagggac ggtaccaaac ctcacccatt tgcctgacgg ttgcgctttt cgcggatcgtt gctatgcggc aggtgcacag tgtgaaaacg tcccggcgct gacagcgtgt 660 ggtgacaaca accagcgctg tgcctgttgg tatccgcagc aggaggttat aaggtgtga 720 cacgttatta acgttacgag acgtccctat ccctttcccg gcccgtaaaa acc 773
```

<210> 5525
<211> 423
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (426)...(66)
<223> similar to gi4062426 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5525 cccatcatta cgaattcaat gtccgtaccc gtagatcgca cagagtggga aagccttgtt 60 ttatcccttc ctgagaatgt tcgatctgca tatcttttaa aaagataacc atcagcgaca 120 gedacaaaat teegttgaca aggttgaaga gattaaacag teegttgeee eegtteagee 180 aggicatitti getgatttea ataccaaegg taaagateag cattigeage atteceateg 240 eggeagaaac egtacettta eteatatege tggeaaacag ggttaatege accagteceg 300 cattegedag accaataceg aaagdataaa taettaacee ggdagteate cataaatacg 360 cgtgcgatga gataaccgtt gccgcagcag cgaccaatag accaatcata atcgccagc 420 cgc 423

<210> 5526
<211> 648
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (627)...(45)
<223> similar to gi504496 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5526
acggcaaagg gaagagaaag ttgcccgcat gggcgggtaa ctaccttaca gcccccgcca tccatgccga taactcccgt agctctttt cctgttccgg gaagtcaacc aacagcgctt 120
cgcactcctg ttgcagcata tctgcgcggt acaggcagcc ttgcagtcgt ccggcgaggg 180

```
cttccagcgg cgcggggttg aggctgtcgg taaacacctg ggcgcgggtg atatggcctt
                                                                      240
tttcaacgtc gaaatgcagt tccacgccgc cccaggtaaa gcgttcatcc agcagatgcg
                                                                      3.00
agaatgccgq agcctgaccg aagttccatt cccagctact ctggcgggca aaggtttcgg
                                                                      360
cgaagtttgg caagtctggc gttttgttcg gggagatgat ttccgcttcc acgcgctcgc
                                                                      420
cataatgggc gaaaaaggcc teggttatgg cetegeaaac etgeteatgg gtgateeceg
                                                                      480
gcaacagete ggtgaggttg gtcacgeggg aaegtacega egtaatgeet ttegeegeea
                                                                      540
gtttcttttt atccggattg agatagtttt ccaggccaag gagattaact tggataacca
                                                                      600
cagggttttg gcagtcacca cgatgtacag gtacggacat agaattcg
                                                                      648
```

```
<210> 5527
<211> 417
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (418)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> in = a,t,c or g
<220>
<21> misc_feature
<221> misc_feature
<222> (6) ... (300)
<223> similar to gi1788533 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<210> 5528
<211> 380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (377)...(198)
<223> similar to gi457174 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5528
atggtaccgc attattacca tgtacgaaga ccagcagcct gataactggc gcgtacaggc 60
gatactgtat gcatgagtgt catctacagc aaatgaacaa tgccggatgc ggcgcgagcg 120
ccttgtccgg cctacaattt tcacatattt catttagtta atcgaaacca gcgtcgcatc 180
agtcgtatac gcttacacac acactccccc cgtcgcccgc agcaataaat cattctggat 240
ctgctctgac aaccgtacgc cgccgcggt atctaacatc acctgacacc acgcctgcgc 300
cattggcgga gaagcatatt tcaacatttg cgcaccgcag cccagcagga atagctgatg 360
agtaatctct cgctccactt
```

```
<210> 5529
<211> 595
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(472)
<223> similar to gi1773101 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5529 cegettegae gatttegtae gttgeegatg ctaaagatge ggactaettg ateaaaegte 60 atttccgtct atcgccgcgt attttacagg ggcaggcact gegcgatctg gcaaattcag 120 ccatcgatct ctctgacggt ttgatttccg atctcgggca tatcgtgaaa gccagcgact 180 geggegeacg tattgacetg geattgetge egttttetga tgegetttet egecatgttq 240 aaccggaaca ggcgctgcgc tgggcgctct ctggcggtga agattacgag ttgtgtttca 300 ctgtgddgga actgaaccgt ggdgddtgg atgtggdtdt dggacacctg ggdgtaccgt 360 ttacctgtat cgggcaaatg accgccgata tcgaaggget ttgttttatt cgtgacggcg 420 aacctgttac attagactgg aaaggatatg accattttgc cacgccataa agatgtcgcg 480 aaaagtcgcc tgaagatgag taatccgtgg catctacttg ctgtcggatt cggaagtgga 540, ttaageeega tegtteetgg gaegatggge tegeaegata tegtegaeee gggaa 595

```
<210> 5530
<211> 646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (649)...(351)
<223> similar to gi4062774 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5530
caaaaaaatc atccatccgg ctggtcagca actgtagttg ttaatgtgac agagccattg
                                                                       60
cccatgatag tgtccattaa aaggatggac actatttccc cggaacetca actcgccgca
                                                                      120
caggogttot acatagatog ottoogttto attgttgact agaactggac atcagataaa
                                                                      180
tcgcgcttta cccttgatgg agcctgtaca taggtggtgt gtaattgcct gcttgggata
                                                                      240
tgttcatttc accatcaaat gaaggttaaa ttatggacga caaacaattg caggetcagg
                                                                      300
ctgcgttcag caaagcatcg caaccggcga tagatgcttc attaaattta agattcagct
                                                                      360
tectetteag ceaceegtae gecaatette aacaetteat tatettett eteggeeace
                                                                      420
gtccagatca tcccggcaaa ctctacctgg tcaccgacaa ccggtgccgc gcctaacaac
                                                                      480
tgctggacaa tttcacccag cgtttgctgc ttatcacgat attctcgccc gtcttccagg
                                                                      540
ccatatatca gcgcaacatc agcatatttg gcgctggctt cgagaatgaa gtcaccaaag
                                                                      600
aagcgttgat ccagcgcgac cggcggcgac tggctgaaca gtttac
                                                                      646
```

```
<210> 5531
<211> 586
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(569)
<223> similar to gi41625 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5531
aacgacaggt tetetgaett aacgecagaa acgetggtta egegeaataa agegeageta
                                                                       60
aaagcgttct gggagaaaca cagcgacatc attcttaagc cgctggacgg tatgggcggc
                                                                      120
gegtegattt teegegtgaa agaaggegat ceaaaceteg gegtgattge egaaaceetg
                                                                      180
actgageatg geactegeta etgeatggeg caaaattace tgecageeat taaagatgge
                                                                      240
gacaaacgcg tgctggtggt ggatggcgag ccggtaccgt actgcctggc gcgtattccg
                                                                      300
caggggggcg aaacccgtgg caatctggct gccggtggtc gcggtgaacc tcgtccgctg
                                                                      360
acggaaagtg actggaaaat cgcccgtcag atcgggccga cgctgaaaga aaaagggctg
                                                                      420
atttttgttg gtctggatat catcggcgac cgtctgactg aaattaacgt caccagccca
                                                                      480
acctgtattc gtgagattga agcagagttt ccggtgtcga tcaccggaat gttaatggat
                                                                      540
gccatcgaag cacgtttaca gcagcagtaa cccaccttag cgagaa
                                                                      586
```

```
<210> 5532
<211> 808
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(734)
```

<223> similar to gi581095 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5532
catgitateg gagacetqce aacqtatggt tategteggg tatgggegtt gettegeage
                                                                       60
cagccagaac ttgatggtat gcctgcgatc aatgccaaac gtgtttaccg gatcatgcgc
                                                                      120
cagaatgege tgttgettga gegaaaacet getgtacege categaaacg ggcacataca
                                                                      180
ggcagagtgg ccgtgaaaga aagcaatcag cgatggtgct ctgacgggtt cgagttctgc
                                                                      240
tgtgataacg gagagagact gcgtgtcacg ttcgcgctgg actgctgtga tcgtgaggca
                                                                      300
ctgcactggg cggtcactac cggcggcttc aacagtgaaa cagtacagga cgtcatgctg
                                                                      360
ggageggtgg aacgeegett eggeaacgat etteegtegt etceagtgga gtggetgaeg
                                                                      420
gataatggtt catgctaccg ggctaatgaa acacgccagt tcgcccggat gttgggactt
                                                                      480
gaaccgaaga acacggeggt geggagteeg gagagtaacg gaatagcaga gagettegtg
                                                                      540
aaaacgataa agcgtgacta catcagtatc atgcccaaac cagacgggtt aacggcagca
                                                                      600
aagaaccttg cagaggcgtt cgaqcattat aacqaatqqc atccqcataq tqcqctqqqt
                                                                      660
tategetege caegggaata tetqeqqeaq eqqqettqta atqqqttaaq tqataacaqa
                                                                      720
tgtctggaaa tataggggca aatccaataa acaattggaa tttacttcca ttgatctgtt
                                                                      780
tactcagtgg ttgtcacgtt ttcgagga
                                                                      808
```

```
<210> 5533
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (385)...(238)
<223> similar to gi1736484 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5533
gagatggaaa aactaacagc tgacattgtt gcctggeggc ggccctcaca aactccagat 60
gatgagctac ctgttcggtg agtgaggttt tacgaggctc atattgcgct gctgcaactt 120
tccagaacga cataatgact tccttttcaa aatgactgca aattatgagt gcggtttaga 180
aaatactcat aatttagcag gcgttatgta agaaagtgta actctgtata agttttattt 240:
aagtttgggc tcgtaaggta aacgtgacag attgaccgaa gccaaacggt gggcaataag 300
ccgctcgcga aaccagctgc gcaaatgttc aggctgttca cgttcaaccg cttcagcgat 360
caccggcata ttgtagcgtt cttt
```

```
<210> 5534
<211> 1542
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (40)...(523)
<223> similar to gi665970 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5534
tttcgtgtgg actggggccg gataatggcg ggcgctgcag aagatgcgcg agctcttttc
                                                                       60
cgggctgggg tetgcgcggc cetggaggcc tggccggcct tgcagatcgc tgtggagaat
                                                                      120
ggcttcgggg gtgtgcacag ccaggagaag gccaagtggc tggggggtgc agtggaggat
                                                                      180
tacttcatgc gcaatgctga cttggagcta gatgaggtgg aagacttcct tggagagctg
                                                                      240
ttgaccaacg agtttgatac agttgtggaa gacgggagtc tgccccaggt gagccagcaa
                                                                      300
ctgcagacca tgttccacca cttccagagg ggtgatgggg ctgctctgag ggagatggcc
                                                                      360
teetgeatea eteagagaaa atgeaaggte acageeactg caettaagae agetagagag
                                                                      420
actgatgagg atgaagatga tgtggacagt gtggaagaga tggaggtcac agctacgaat
                                                                      480
gatggggctg ctacagatgg ggtctgcccc cagcctgaac cctctgatcc agacgctcag
                                                                      540
actattaagg aagaggatat agtggaagat ggctggacca ttgtccggag aaaaaaatga
                                                                      600
gtggggatga ttggaaatgg ctttgggccc ttatttgctg ttctaagagt tgtctgtagg
                                                                      660
ggtttttttt tttgaggatt gaagacetgt gggaettggt taccccatet ccaccetete
                                                                      720
ccctgttcct ctgtctggct ccctccaggg caaggaaaac ctagggtcct tggtcttggg
                                                                      780
ggtgggggga cettttedag catatteded tgggdettta gttaadated gagtgadgaa
                                                                      840
gccgggttcc ccagtacagt gtcttttggg tgcggtcatt gtgaggaagg ggatgagtga
                                                                      900
gtgtgggtgt ggctggagga ggagctagat gccggtggac agtgggcagg tggatttggg
                                                                      960
gaggagagga tcagcagcag cagcagtact cagtgatagg gggctggctg qgtcaggaat
                                                                     1020
ggtgagatga acatgcaagt ggaagagaga atagttgaaa atgtgaatga aagtagctct
                                                                     1080
ggagcetete cettacecca ecceacacae aegeaacage tetgtacece tgeccagaae
                                                                     1140
ttggaacete ccaggaatge tgeetteett cageccagee tecagteetg ggtteeetea
                                                                     1200
ggaattegaa gacettgget aggtggtgag ettggaagag etgggetttg tittetgtet
                                                                     1260
cetetaacet étiteettae teettateee ateceatitg agiteagggg tgaggettaa
                                                                     1320
gatettaata aataataeet taetgettaa tetgtggett gaeetgtgag tagtageett
                                                                     1380
agaatcagee ttetgggage teagetteag agtttacaag ggageagttt etgggeeeae
                                                                     1440
cctagcagcc tgggtacttt ggacaaccaa acagatgaac gaacggagca cagcagtgct
                                                                     1500
atgaaagtta ctgtaagcct gaaaataaac tggtattttt ct
                                                                     1542
```

```
<210> 5535
<211> 1072
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1073)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (142) ... (359)
<223> similar to gi3878319 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5535
ggtggaatte etgegtaeta eggettette eagteacete ggeeeggate gggaagtgte
                                                                   60
aagegggege teececatet eegeegetat taccaetgaa eeeggaeeee etacceaggt
                                                                  120
180
ctctttgttt gcacctgtgc ctacttcaag aaagtacctc gtctcaaaac ctggctgcta
                                                                  240
tcagagaaga agggtgtttg gggtgtgttt tacaaagccg ctgtgattgg aaccaggctg
                                                                  300
catgctgctg tggcaattgc ttgtgttgta atggcctttt acgtcctgtt tataaaatga
                                                                  360
attecaaage acceaagtea teaactgeea accaagggga eggggatgaa gaacetgttg
                                                                  420
gagacctgaa cccagtgtag gagagttcag ctgaaatcat cggtccccag gatgacacca
                                                                  480
cagcatctgc ccctgctata tgtggggaaa actcatggtc acgaacatta tttatgcttc
                                                                  540
aggggactac agaaagccag cttcctttga tctatgtgta aatcagtcct tggcagagtg
                                                                  600
catataatgt ccggataaat tacacccctc ggtgataaga ttacatacct ccttcataaa
                                                                  660
aacctgtcat cctgttttgt tcttcagctc ctcatcagga tcttttcaaa ctgaggctca
                                                                  720
ttagggaagg aactaggctg tgttcagact tcttttgaag agagagaatt ttcaagactt
                                                                  780
cttttcactc tttgatttgg atctggcaaa ttggggaggg gatgctggggt gggaaacagt
                                                                  840
tatgaaaatg ccaaagaaaa ttctttggct ttagaaaatt ttatcctttc atggtaaccc
                                                                  900
atccggggaa ccttaaaaga gagggcatag tgcttcattg gcaaaaagag gaacagatga
                                                                  960
agtagotgtg tttatgtggo tgggtatott tgagagtttt tgcccaagga aantotgggg
                                                                 1020
cctacataaa tttggggatt tttccgtgtg gtggggaccc ggaaggegtg gc
                                                                 1072
```

```
<210> 5536
<211> 989
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (876)...(526)
<223> similar to gi577311 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5536
ttttttttt tatctttctg ttctctgttc attgaacatt ggtttttaag gttccaaacc
                                                                       60
tactaaatga aaagtggaat gaatggtact tgtagcttgg atttaactca attttgaata
                                                                      120
ttgtcaatct agtacaattt cttaaattta gettaagata tetgcaaage caacaatgtt
                                                                      180
totaagacaa gatgaggtta ogggottoaa toaataagaa aaataaaaaa goaattaatt
                                                                      240
tattatttgg aacccaccag gtcattatgc attaattttt aaatactgca acttcatgtt
                                                                      300
ttatagaaac tagaaacatg attcaaaatg tcacaaagtt atattaaatt aaaaccactt
                                                                      360
tagacaatte aaggteteae tgaceaaagt eeattaaggt gacagttttg etgttttgtt
                                                                      420
actggttccc acatgatatc atctcttctc aatttcattt gaagattatg aactcgtatt
                                                                      480
ggatgaaagc tgctgttttt ctgaaaaagg ttagtgtcag tcaaacattt tctggggcta
                                                                      540
ttttttatgt tetttgatee tttagggtag etgtettett getgaataee tgaagettea
                                                                      600
ctcatctttg agttttgaac tttttgctgc agtttacaga cactgtcttg atgcttcttc
                                                                      660
agtitiggaga titigticice titaattice attiticitiga giaaacacte taqticacat
                                                                      720
totatgtogt cacagactga atgactttca gtttccttca tttgtttcag tagttcttgg
                                                                      780
tgctccatgc tcatttggtc cagctcatct tgcattgcca tcaaaagttc agataaattg
                                                                      840
```

tcacaaatgg aaatggactt ttctgagtca ggaggaatag ctttacacca ggaagttgtt 900 ctagaaggct tggggagaca tctagtctca gtcacgttaa aaggtttctg aaggatatgt 960 989 gggtcacgat gttgcctcat ctgcaaaaa <210> 5537 <211> 322 <212> DNA <213> Homo sapiens <220> <221> misc feature <222> (308) ... (112) <223> similar to gi5689427 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5537 ctacatggtc cctctcatga gtctctgtgc cagaggttgg tgggggaagg gagaaaggaa 60 aggagggaga ggatgtcact gtcctcaaac cgagcttctc tgctccatgc tatcctgggg 120 getteaggtg aatggetgeg etgttgggge gageageeag gatgtagagg acattetett 180 gcaggaaggt aggccagtcc acaaatctgg actcctgctc tgtgggcagc agggtcttgt 240 cetgaetett getgetgetg etggetggge tgetatetge gatgggaece acatggetga 300 tgctgacacg aaatcgtcga cc 322 <210> 5538 <211> 1825 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (628)...(1595) <223> similar to gi2589223 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5538 ctetttatt ecetttega egattegeg ggacatgaca getttaacce atgactcaaa 60 gtctcaggga ataatacaca gtgttgaaat gcctctcttg cctaccaggt ctcaagtttg 120 acatgaaata catgaacttc cgtgtgaagg cctgtcacaa ggcagttgca ggagagttct 180 ctgagccggt gactctggag acaccaggtg actggaatcc cagcactttg ggaggccgag 240 gcgggtggat cacttgaggt caggagttca agaccagcct ggccaacatg gagaaaccct 300 gtetetaeta aaaatataaa aaattageeg ggeeatggtg geteaegaet gtaateeeag : 360 ctactcagga ggctgaggca ggagaatcgc ttgaaccagg gagtcggagg ttgcagtgag 420

480

ccaagategt gecactgeac tecageetgg gtgacaagag caagactetg tetetaaaaa

```
aaaaaaagtc tcccccctgc caaacatgga acccctttgt ggccatgccc ccaaaattgt
                                                                      540
                                                                      600
ccaacatgtg gttgggcagc cctgcaggaa gccccctgcc ccctgaacca ggcacagaat
ceegaceece teteetttee gtettggtea gggeecageg caceegggat egacetgget
                                                                      660
gagtccctgg tggcagataa ctgtgtgacc ctggtgtggc gcatgccgga tgaggacagc
                                                                      720
aagattgacc actacgtgct ggagtaccgg cggaccaact tcgagggccc gccccgcctc
                                                                      780
aaggaggacc agccctggat ggtcatcgag ggcatccggc agacagagta caccctgaca
                                                                      840
ggtctcaagt ttgacatgaa atacatgaac ttccgtgtga aggcctgtaa caaggcagtt
                                                                      900
geaggagagt tetetgagee ggtgaetetg gagacaceag egtteatgtt eegeetggat
                                                                      960
gegtecacat eccaceagaa ectgegggtg gatgatetet eegtggagtg ggaegetatg
                                                                     1020
ggcgggaagg tgcaggatat caaggctcgc gagaaagatg gcaaggggcg gacggcgtct
                                                                     1080
cccatcaact ccccagccag aggtactcca tctcccaaga ggatgccctc aggtcgtggg
                                                                     1140
ggacgggacc gcttcaccgc tgagtcctac acagttctgg gggacacgct gatcgacggc
                                                                     1200
                                                                     1260
ggggagcatt actgggaggt gcgctacgag ccggacagca aggcgttcgg cgtgggcgtg
gectacegea geetgggeeg ettegageaa etgggeaaga eggeegeete etggtgeetg
                                                                     1320
cacgicaaca attggctgca ggicagcitc acggccaagc acgccaacaa ggicaaggtg
                                                                     1380
ctggacgccc ccgtgcccga ctgcctgggt gtgcactgtg acttccacca aggcctcctg
                                                                     1440
teettetaca atgecegeae caaacaagtg etgeacaett teaagaceag gtteacaeag
                                                                     1500
cegetgetge etgettteac ggtatggtgt ggcagettee aggtgaegae aggeetgeag
                                                                     1560
gtccccagtg ctgtgcgctg cctgcaaaag cgaggcagtg ctaccagcag ctccaacacc
                                                                     1620
agceteacet aggececeag geacecacee agetggggtg tttttgggggg agtegeegee
                                                                     1680
aageccagge tgetggagee aggeaceete etetgteact tgetgettgg ageettaaet
                                                                     1740
ccagatgggg gggtcaccaa gagggagtgg gcaccctggc gggccctctc cccacctcac
                                                                     1800
ctcttaataa aggtcagaca ctggc
                                                                     1825
```

```
<210> 5539
<211> 2802
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1256)...(2063)

<223> similar to gi1903458 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5539
geggeegegg gegggaggtg etteceaagg accgtagatg cetetetaga geatgagete
                                                                       60
aggcaagagt gcccgctaca accgcttctc cggggggccc agcaatcttc ccaccccaga
                                                                      120
egteaceaca gggaceagaa tggaaacgae etteggacee geetttteag eegteaceae
                                                                      180
catcacaaaa gctgacggga ccagcaccta caagcagcac tgcaggacac cctcctcctc
                                                                      240
cagcaccett gectaetece egegggaega ggaggaeage atgeceecea teagcaetee
                                                                      300
cogoogoted gactedgeca tototyticg etceettgea etcagagtee aggatgtete
                                                                      360
tgegeteeae atteteaetg eeegaggagg aggaggagee ggageeaetg gtgtttgegg
                                                                      420
agcagecete ggtgaagetg tgetgaeage tetgetgeag egtetteaaa gaeeeegtga
                                                                      480
tcaccacgtg tgggcacacg ttctgtatga gatgcgcctt gaagtcatag aagggcgccg
                                                                      540
tggacaacgt caaactgacc gcggaggtga acaacatcac ggtggccgag cagatcgggg
                                                                      600
agetetteat ceaetgeegg catggetgee gggtageggg cagegggaag ceeeccatet
                                                                      660
ttgaggtgga cccccgaggg tgccccttca ccatcaagct cagcgcccgg aaggaccacg
                                                                      720
agggcagetg tgactacagg cetgtgeggt gteccaacaa ceccagetge ceccegetge
                                                                      780
tcaggatgaa cctggaggcc cacctcaagg agtgcgagca catcaaatgc ccccactcca
                                                                      840
```

```
900
agtacgggtg cacgttcatc gggaaccagg acacttacga gacccacctg gagacttgcc
gcttcgaggg cctgaaggag tttctgcagc agacggatga ccgcttccac gagatgcacg
                                                                      960
tggctctggc ccagaaggac caggagatcg ccttcctgcg ctccatgctg ggaaagctct
                                                                     1020
cggagaagat cgaccagcta gagaagagcc tggagctcaa gtttgacgtc ctgggacgaa.
                                                                     1080
aaccagagca ageteagega eggaceteat ggagtteegg egggaegeat eeatgttaaa
                                                                     1140
tgacgagetg teccacatea aegegegget gaacatggge atcetagget ectacgacee
                                                                     1200
teageagate tteaagtgea aagggaeett tgtgggeeac cagggeeetg tgtggtgtet
                                                                     1260
etgegtetae tecatgggtg acetgetett eagtggetee tetgacaaga ceatcaaggt
                                                                     1320
gtgggacaca tgtaccacct acaagtgtca gaagacactg gagggccatg atggcatcgt
                                                                     1380
gctggctctc tgcatccagg ggtgcaaact ctacagcggc tctgcagact gcaccatcat
                                                                     1440
tgtgtgggac atccagaacc tgcagaaggt gaacaccatc cgggcccatg acaacccggt
                                                                     1500
gtgcacgctg gtctcctcac acaacgtgct cttcageggc tccctgaagg ccatcaaggt
                                                                     1560
ctgggacatc gtgggcactg agctgaagtt gaagaaggag ctcacaggcc tcaaccactg
                                                                     1620
ggtgcgggcc ctggtggctg cccagagcta cctgtacagc ggctcctacc agacaatcaa
                                                                     1680
gatetgggae ateegaacee ttgaetgeat ceaegteetg eagaegtetg gtggeagegt
                                                                     1740
ctactccatt getgtgacaa atcaccacat tgtetgtgge acetacgaga acetcateca
                                                                     1800
cgtgtgggac attgagtcca aggagcaggt gcggaccctc acgggccacg tgggcaccgt
                                                                     1860
gtatgecetg geggteatet egaegeeaga eeagaeeaaa gtetteagtg cateetaega
                                                                     1920
ceggteeete agggtetgga gtatggaeaa catgatetge aegeagaeee tgetgegtea
                                                                     1980
ccagggcagt gtcaccgcgc tggctgtgtc ccggggccga ctcttctcag gggctgtgga
                                                                     2040
tagcactgtg aaggtttgga cttgctaaca ggatccaggc caggctgtgg tttcccctga
                                                                     2100
accagocotg gacotttotg agocaggotg gocacatggg gtggtotogg ggtttotgod
                                                                     2160
tgccccgtgg gcataggtgg acaggctctg gcagccgggc agtgccctcc ccgtcccatg
                                                                     2220
eteggegage etecetetae teggeactgt cettgetgee eageecetet etgggtgeea
                                                                     2280
ggtacgacgc ttgccccggc ccaccctcca tccccaccct ccatccccac cctagatgga
                                                                     2340
gcgagggcct ttttactcac cttttctacc gtttttagac tgtatgtaga tttggttacc
                                                                     2400
tectggttga aataaatget ceacagactg tggctgtgag tggggacage tectegggae
                                                                    . 2460
aagggggctg tgtgtggcct tgaggttggt gtgcacaggc actggctgct gtgagtgggg
                                                                     2520
gggcatgggg cagtttcctt tggtggaccc caggacttcg gcccactccg gggcctcccc
                                                                     2580
tecetgetag gaggeaacte gacacacca agetgetgge etceagtece atetececca
                                                                     2640
acacattgtg ccccaaaaaa gtgagccagg cacctctgtt tcctgctgtt tattgacagc
                                                                     2700
cgacggagac gccttgccca gacctcccct gcccacctgc tggagcccag cctgtgccgc
                                                                     2760
cctctgagga gaggcctggg gggacagctg ggcacgtcca ct
                                                                     2802
```

```
<210> 5540
<211> 1833
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(1059)
<223> similar to gi5706505 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5540

gcggccgccc cctcgccgt cacgcacggc gtttacagac tctcctgcgg caggcggtgg 60
aactacaaag ggatcggtgc ctatatcaca ataccaaact tgataataat ctagattctg
tgtctctgct tatagaccat gtttgtagta ggaggcagtt cccatgttat acgcagcaga 180
tacttacgga gcattgtaat gaagtgtggt tctgtaaatt ctctaatgat ggcactaaac 240
```

```
tagcaacagg atcaaaagat acaacagtta tcatatggca agttgatccg gatacacacc
                                                                      300
tgctaaaact gcttaaaaca ttagaaggac atgcttatgg cgtttcttat attgcatgga
                                                                      360
gtccagatga caactatctt gttgcttgtg gcccagatga ctgctctgag ctttggcttt
                                                                      420
ggaatgtaca aacaggagaa ctaaggacaa aaatgagcca gtctcatgaa gacagtttga
                                                                      480
caagtgtggc ttggaatcca gatgggaagc gctttgtgac tggaggtcag cgtgggcagt
                                                                      540
tctatcagtg tgacttagat ggtaatctcc ttgactcctg ggaaggggta agagtgcaat
                                                                      600
gcctttggtg cttgagtgat ggaaagactg ttctggcatc agatacacac cagcgaattc
                                                                      660
ggggctataa cttcgaggac cttacagata ggaacatagt acaagaagat catcctatta
                                                                      720
tgtcttttac tatttcaaaa aatggccgat tagctttgtt aaatgtagca actcagggag
                                                                      780
ttcatttatg ggacttgcaa gacagagttt tagtaagaaa gtatcaaggt gttacacaag
                                                                      840
ggttttatac aattcattca tgttttggag gccataatga agacttcatc gctagtggca
                                                                      900
gtgaagatca caaggtttac atctggcaca aacgtagtga actgccaatt gcggagctga
                                                                      960
cagggcacac acgtacagta aactgtgtga gctggaaccc acagattcca tccatgatgg
                                                                     1020
ccagcgcctc agatgatggc actgttagaa tatggggacc agcacctttt atagaccacc
                                                                     1080
agaatattga agaggaatgc agtagcatgg atagttgatg gtgaatttgg agcagacgac
                                                                     1140
ttctgtttaa cttaaaatta gtcgtatttt aatggcttgg gatttggtgc aaacaacat
                                                                     1200
gattgatago tggacagaca tgctcgtcat gaaaaaagaa ccatttctga agcccgattg,
                                                                     1260
gggccaaaca tttacacctt gcttcatagt aaccagttga gatgaagcac gtcgttagaa 1
                                                                     1320
cgttgttgga caccatgttg aattattccc ccatcggttg tgaagaactg tgctacattc
                                                                     1380
aggettacce attgaactea gtatatatat tttttteett cetgtetttt gtetggeagg
                                                                     1440
ataccattct tgttgctctt ctgtgtaatg aagtttaaat gcttgtttgg aaaactttat
                                                                     1500
ttaacagttt agaaggcttg atagaaagag tgcattagtc tgaagagtat acattggata
                                                                     1560
ggaaagaatt teettetttt gttteteeaa atettteege ettatttage ttgagatett
                                                                     1620
tgcagcttgg ttcatggatt ctagccttgc ccgttgcgca gtatatactg atccagatga
                                                                     1680
taaaccagtg aactatgtca aaagcactct caaatattac attttggaca aaaagttttg
                                                                     1740
tacttttcac atagettgtt geceegtaaa aaggggtaac agcacaattt tttaaaaata
                                                                     1800
aattaagaag tatttatagg attaaaaaaa aaa
                                                                     1833
```

```
<210> 5541
<211> 1251
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1194)...(366)

<223> similar to gill77358 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5541
tttttaagag gttcatgaca caaatatatt tatattaggt gaatcaatca cccaggatac
                                                                       60
ccaagatetg atacttteac aaactgettg gaggeaactt aagtatggaa gaagetteag
                                                                      120
aaccagccca gctttctgct ctctggctcc aggctgcatc ctttttaact atttaatgtg
                                                                      180
gcgtggaaaa tgtcagcata atgaggcttt ctcatctcaa tagagaacct aggaaggaca
                                                                      240
aggccgaatt aaaaaaaaaa tcttcattaa agaatttaat agggagttga ttatgttgta
                                                                      300
gaatcatate greetattet grgacacatt agaaacataa aettraggge tretteater
                                                                      360
ccacagcata gaggtetgat egettetgte taaaaaeggg gatttgetgg egtattteag
                                                                      420
ccagcttctt caggtctatg tctgaataca cgattgcttc ttctgtgcca gctttggcta
                                                                      480
gaacctcccc ccaagggttc accacggtgc tgtgtcccca ggcaacatag gaggctttgt
                                                                      540
catcccgggc aggagaggct gtggccacat acacctgatt atcaacagcc cggcttcgct
                                                                      600
```

```
gaagtaactc ccaatgggct ggtccagtgg tcagattaaa agctcctgga tataccaaca
                                                                      660
getggeagee tetetgtgeg tagatttgtg caagetetge aaacegeatg tegtageaga
                                                                      720
tgcccagacc cactctgcag taaggagtat caaatgtgga gaaactatca cccggactca
                                                                      780
atgttttaga ttcttgaaat gtaatttttc caggaacatc aatgtcaaac agatggatct
                                                                      840
ttctatactt tgctagtaaa gttccatcag gcccaaacac agcacaggtg ttatataatt
                                                                      900
teccageate etetteaggg atagageete caatgagata tatgetgeat teetttgeta
                                                                      960
cttcagaaag cttctgtgtg gattcaccag gaattttctc tgcatattca ggaaaatatt
                                                                     1020
tegetecata tggagaatta aageatteeg geaaagaaac tattttgget cettgegttg
                                                                     1080
ctgcctcccg gatgaagcta caagcgcgag tgacgttatc tgatttgatg gaagaaatct
                                                                     1140
gaagctggat gagggccaag cggaaagagg tcatgactct gcagacaagc accacctgcg
                                                                     1200
gegeggaatg agegetggag ateeggegga eegeggegte getacaegaa a
                                                                     1251
```

```
<210> 5542
<211> 1553
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1324)...(641)
<223> similar to gi3878106 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5542
ttttttttt ttaagtttga agccttgccc aagctttaat gtcatgctaa ccagttacct
                                                                       60
tgttagaget gggaageeac ettttgetea aaatgeagae ttetgeettt gaaaacacae
                                                                      120 -
cacacctgat tttaagtgct taaaggacag aaaatgtcgt tgctttaaat tgttgctttg
                                                                      180
ttcagagaca tctggatttg ctgtatccat acaagcaaaa gcttttccaa ttccagaatc
                                                                      240
aacccacact aattigitat tgcctcgtac tgtattggcc cagetgtaat caactcagca
                                                                      300
ggcttttggt tgtaaattca agtggaaatt gagttggtct tatttgtgcc cgttgatatc
                                                                      360
tgagggctgt gaggaagatg gccagtaggt caaagggaat agtgttgaaa agctgaccag
                                                                      420
tactgggcag gtggccggct gtccctcagg caccacaacg ccgagccacg gtaaggggca
                                                                      480
tgagccacat ttgcagaata tagccagagt cettecagaa ceteetgatt egegecagga
                                                                      540
ggcatcccag ggcacacaag tgtcaagggc ctactcaggt gcttggcaga gctctctgtg
                                                                      600
tgttattaac agaagagget acggettaga gtggaaagga geatgtgatg getageggtg
                                                                      660
ggcagcctgt gtactctgcc aagtttgggt ggtccaggtc cccacgattt ctgtgtggag
                                                                      720
ggttgtccgg catctggcca ctaggggggc cggtggttct cacacacac cagcggggct
                                                                      780
cettageace tggettatae agetteetgg ggacgecaat ceagtetetg etcacacete
                                                                      840
cactettetg ggageaceag ageeggetge ceetggetga getecaetee gegttgeaeg
                                                                      900
gegggaatgt etgettetet tgeagetgta gtttgttgge etceaageet etggtgateg
                                                                      960
cagettetae etgggteagt geeggggtgg geageecate eteteegtag aacegteetg
                                                                     1020
traccetere aacacacaca taattettet catagaatga aagecaattg tgaagtgtea
                                                                     1080
geateteage ggetgaeagg teggataegt catecaegag geetgettea gaacagteee
                                                                     1140
cggtcacgaa agctctggat gcgtctcggc ctgcgaagcc gctatagtgg gacccaggct
                                                                     1200
cgtagtgcct ccggccggag gacacatcgt agacacggcc gagcaacgcc aagtacaggc
                                                                     1260
cegggteece tgggeegeeg eggtagegag acageteete eggtatgaaa aggegaaage
                                                                     1320
cagegegggg accecaceag cecataagee gtgetgeeat tacegetget geggetacag
                                                                     1380
ccaggcccaa caaaagccca cggcctccgc acctcaacat ctatataggc ccacccgctc
                                                                    . 1440
egeacticeg aggitgeege etetatetae agetaagatg geegagaege egagegitgae
                                                                    . 1500
gtcateggeg egegegetet egetetetet etegegeget agtgetegeg ete
                                                                     1553
```

```
<210> 5543
<211> 1516
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1094)
<223> similar to gi5911963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5543
gcaaagcgca aaaagataaa tcagaattca agtaaagaga agattaataa tggacaagaa
                                                                       60
gtcaaaatcg atcagagaaa tgttaaaaaa gagttcacta gccatgcttt agattctcat
                                                                      120
atcttagatt attatgaaaa tccagccatc aaagaggatg tatcaacatt aataggtgat
                                                                      180
gatttggcat cttgcaaaga tgagactgat gaaagctcaa aagaagaaac tgagcctcaa
                                                                      240
gtgctgaagt ttagagtcac atgcaacagg gcaggagaga aacattgctt tacctcaaat
                                                                      300
gaggetgeaa gagattttgg gggtgetgtt caagattatt ttaagtggaa ggeegacatg
                                                                      360
accaactttg atgtggaggt tcttttgaac atccatgata atgaagtcat tgtgggcatt
                                                                      420
gcattgactg aagagagtet ecacegaaga aatataacae attttggace tacaactett
                                                                      480
agateaaete tigeetaigg gaigeteagg eteigigate eteiaeetta igatataata
                                                                      540
gtcgatccaa tgtgtggaac tggggcaata ccaatagagg gggccactga atggtctgac
                                                                      600
tgcttccata ttgctggtga taataatcca ctggctgtga atagagcagc aaataacatt
                                                                      660
gcatctttat tgaccaagag ccaaattaaa gaaggcaaac cctcctgggg cttgcccata
                                                                      720
gatgctgttc agtgggatat ctgcaatctg ccattgagaa ctggctctgt ggatattatt
                                                                      780
gtaacagatt tgccatttgg aaaaaggatg ggatccaaga agagaaactg gaacctttat
                                                                      840
ccagcttgcc tacgggagat gagccgtgtc tgcacaccta ccacaggccg agctgtacta
                                                                      900
cttactcaag acacaaaatg ctttaccaag gegttatetg gaatgegaca egtatggega
                                                                      960
aaggtggata cagtctgggt gaacgttggt ggtcttcgtg ctgcagttta cgttctgata
                                                                     1020
cgtacacctc aagcttttgt tcatccttca gaacaagacg gagaaagagg aactctttgg
                                                                     1080
caatgcaaag aatgaagatg actaatagta cttgtacttc ccaccactgg aaatgttagc
                                                                     1140
ataaaagaac ttggagagga aaaaagtatt aacaaaactg cagtctgcac tctttaaacc
                                                                     1200
tgtttaaggc tcttcatcct ggttagcaaa aggtgtgaat gtaatgtgat ggaatttaaa
                                                                     1260
agttttatga gaccaggcac agtggctcac gactgtaatt ccaqcagttt aggaagccga
                                                                     1320
agtgtgcaga tcacctgagg tccggagacc aggcctggcc aacatggtga aaccctgtct
                                                                     1380
ctactagaaa tacaaaaatt agccaggtgt ggtggcgggc gcctgtaatc ccaactactc
                                                                     1440
aggaggetga ggetagagaa teaettgaae eeageaggee ggaggttgee ggtgaagteg
                                                                     1500
agatcacccc attgca
                                                                     1516
```

```
<210> 5544
<211> 492
<212> DNA
<213> Homo sapiens
```

<220>

```
<221> misc_feature
<222> (394)...(280)
<223> similar to gi4589248 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5544
ccgtggccct gcagagcact ccctctcttt ttctagaggc aggaaacagg tccagagagg
                                                                       60
ttcggtggct gtccagtagt tttagtagga agtaaggaag taggaaggta gaagctgaat
                                                                      120
ctaggtagga ctgtgggctc tcgagtgcgt caacttaaca ccattgccca tttcagcacc
                                                                      180
aactcccctq tccctccaqa tqqtqtqtc ctcqaqqqca qactaatccc atcaqqcctt
                                                                      240
ttcaggcctg gcctccctgg cccaccctgc ttagcacctg cggatctcag gggccagctg
                                                                      300
ctccatgtcc tggtggaaga cgtagggagg gttgctgaca atcaggtcca tggggcccca
                                                                      360
gggcaggtgt gtccagetce titetgtegt caaagaagag gacacacagt agggactaac
                                                                      420
ccattgggag gtaaaggatg atageteeac etgecaceat gtgcetetea ccatgecaca
                                                                      480
ccttgggcct gc
                                                                      492
```

```
<210> 5545
<211> 2081
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (37)...(567)
<223> similar to gi3298607 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5545 cgaccatgct taccgattca ctggccgtcg tgactggtga accatcaaaa gagagtgata 60 gaatctggcc cagaccattt gaatgacaat gaatatacca agtttattcc tcctaattat 120 cacacacctc cttatctcac tggtgagcca gaggtaactt accaccgatt aaggccacag 180 gataagtttc tggtgttggc tactgatggg ttgtgggaga ctatqcatag gcaggatqtg 240 gttaggattg tgggtgägta cetaaetgge atgeäteace aacaqeeäat aqetqttqqt 300 ggctacaagg tgactetggg acagatgcat ggcettttaa cagaaaggag aaccaaaatg 360 tecteggtat ttgaggatea gaacgeagea acceatetea ttegecaege tgtgggeaac 420 aacgagtttg ggactgttga tcatgagege etetetaaaa tgettagtet teetgaagag 480 cttgctcgaa tgtacagaga tgacattaca atcattgtag ttcagttcaa ttctcatgtt 540 gtaggggcgt atcaaaacca agaatagtga gtggctcttt cactggcaat tctcaaatga 600 tacacattta aagggcagat ttttttaaaa agatactact ataataaaca tttccaqttq 660 gtcattctaa gcatttaccc ttttgatact ctagctagtc aggtactcca aattgacttt 720 gcagcagggt ggcagggtca ggagagtctg gtcctgccta gctcagattt catggcacct 780 gccacttgaa gcaagtcact totttatcac aggtgtottg aaacattagc ttottttacc 840 aacctgagaa aattaggatg acctggcaaa taagatcttg aataggccaa aagcaagtat 900 cttgctgtgt gtagtctctt ggttaaagtg aagaaacagt actgttcaca cctttcttca 960 ctgagattcc agtgtacatg agaacatata tttattgcat gattttctag atacacagtc 1020 tatgcattat tcatatacat ttattttagc ctaaagtggt tttcaaatcc aqttcttcaa 1080 gccataaatg accaagatcc aagcaatctg aatttgtttt tgtgattatt tgactggaat 1140

```
gcttcttaag tggaataact atactccgtt atccacccga tttcctaatg taattgaaag
                                                                     1200
attitictatt tigccacaca citiggagaca ataagggitti tiagittiat ciactictici
                                                                     1260
attgaagtta aagaaaaaa aaaagatttt tttatttgta ttaatgaaaa gctttagttt.
                                                                     1320
aaaataagga gatccagaat aaaaagaaga gactgatctc ttcaattatt gtcatctgta
                                                                     1380
gccaccagca catcactett atgtaateee caaaggettg gcatgeegta agtgtgtggt
                                                                     1440
gggtagactg ctgccgggga atcgtacttc ttatttagta atgataagac ttttcattat
                                                                     1500
ttttggaatt ttaaagatga cataaataag tttaaatatc aatttgggga gtaaggttta
                                                                     1560
atattgccat cgggtattga gacaggagga agtttctgtt tttctccatt tagacatagg
                                                                     1620
tcaattaaaa tatttgggtt taaaatgact aaatgcttta aacatattgt agcttaagat
                                                                     1680
atatgtgtta agatatatac atgagaaact ttaaaaggta actactgtgc atgcctgatg
                                                                     1740
cttaatagaa tacttagtgg catcaaatgt ttgcagcagt ctccataatt atattcagtc
                                                                     1800
ccttctaata ctgtatcaat gtaaatgaaa taaatatatt caaattggct ttttgatatg
                                                                     1860
catcaagtgg cattttgttc ctgtgtttaa tagtgatctg tatacagctg tqcacatatt
                                                                     1920
gtcatcactt attctagcat cactgttaag gctgtgatta tgtttgatat tcacctggat
                                                                     1980
tttaatacaa gccaatatca gcttcccatt gtgtaataac ttgggtgttt aggagtcttt
                                                                     2040
tcacattttt tggggatatg aactagatgt tcaagaactc c
                                                                     2081
```

```
<210> 5546
<211> 3018
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3019)...(1219)
<223> similar to gi5817280 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5546
aageteaeag caaagagaag ggteetgaaa geaagttgee agttgeeeee tteacagttg
                                                                      60
aatacaaggg tgtaaggcac gaatttetgg tggetecace ecateettee agtgtgeetg
                                                                      120
tgggccctta gtctgagcca ctccatatta atttatatcc cttgctgtgc atatgttacg
                                                                      180
gaatggaatt ttccacgtgg acatgtttag gcaatccccc ctttgcaagt tcccttatct
                                                                      240
gcacaaagca teteatgetg tggagecagt ggcaggttet eegggaecet teeettaetg
                                                                      300
totgootaaa goaaactggo taaattottt cacaagtttt totttttott tttttcttt
                                                                      360
ttetttettt tttttttee aatttgeatt agaaagettt tattgagace aggttaacea
                                                                      420
gtggcctgaa aatattacag gctgaaggaa ggctgaggaa accagtatga aggcagctca
                                                                      480
aatgatgaac taaatatatt ccaaaggtac tatttatact taaggcagtt ttaaaagtga
                                                                      540
ggtcttaacc aaaaagcctt tacatggcat tcaaaacaaa aacaaaaaca aaaaaaacac
                                                                      600
999999999 ggggcactta aatctcttgg attgactaaa agagctaaat tatgtaccca
                                                                      660
aaatctgtac agcaggggcc tgttttcagc aggaaagcct atgtacaagt aagaacctct
                                                                      720
tactettgta acattgteet gttttgtttt gtettataag aatatataac teetateete
                                                                      780
acagagttag tecataagge etcagtgace teacagaaat atggagttaa eetetactae
                                                                      840
agaactattt acactgcact gtaaatacac atatgtgtgt ccaccctcac agctaagctg
                                                                      900
tcaatgcctt gagtgaaggg gttacagctc attcgttttg catctacagt gacaatgaat
                                                                      960
aggcactcaa tacatacttt tttttgcatg aatgataaat gaaatgattt tacattacca
                                                                     1020
ccactattta cattaacatt cctaccatta gccgtctcca aaataaaaac acaaaattgc
                                                                     1080
tgccacatgt tcagcagttt tcacaataca gtgtgtctgg actttttaat qtaaacaaac
                                                                     1140
atgettgatt taccaatttt cagageaagg acacaaaett ageattette taggaatgga
                                                                     1200
aaacttgcca ggaagttact tcattctttt ttttttttc aaaagtgcat ctcgtagtgc
                                                                     1260
```

```
caactgtttt totoggaagg aacgottatt tittgacogg acattotggo tatacogcat
                                                                     1320
catcataaag ttcttctgtt ttttcttctc tttatttgtc gaactggaaa atggatttgt
                                                                     1380
tttggttttc ttcctcacaa attcttttcg gtctgtcttt ccagccattg cagttgctag
                                                                     1440
tettgtetet ttgteagaet ttggettttt atgaaggegt teaatgteee gaagagaaag
                                                                     1500
taattcaccc ctgggctett catcactgtc tatttcaatg tatttcctct tctgggattt
                                                                     1560
cccgggggca gcatcaagtt cttttctcat ttgggccatg cggattttct ggaagtcttc
                                                                     1620
ctgagttaaa actcggctag tgctgatggc tgcagctttg gccttccgct cctccatggg
                                                                     1680
catgctgttc agcttcttgg agatttcttg ctgttcttca tcggaagagt gttgcacatc
                                                                     1740
aatccattca ccatcagcat cctcctcctc actgagactg gtactttccc atccatcttc
                                                                     1800
atcattttca gcattctctt ctttctcaac ttccagaact tctgctcctg gaatgtaatc
                                                                     1860
tttagcatct aattctccat attcttgtac tcttgcttct atggaggcct ctgtaggctt
                                                                     1920
accorggaat ttcttctgca gcatctgagg attcagtgtt cggaagaggt gaatcaaagt
                                                                     1980
totagoagac atcattacat tottatcott gtgtgtttta tactgagoca ggtottggag
                                                                     2040
aagttettea gteatggeea gaggacateg agetgttate teetttatag cattgattee
                                                                     2100
tactgtcatg acttctccag agttcttgtc ggtaacaaaa ttgtttgcca cagtcataag
                                                                     2160
caatgattga ataatctctg ggggtactag gtgatgagat gcttgtgcag caaacagaag
                                                                     2220.
gatettggtt aettetettt ggtggggetg cagaaacett tgcaaaaagg gatagaaatt
                                                                     2280
gaagaggaaa agctcatgaa ttcccaccaa tctggagata aggttcatga gcatcatctt
                                                                     2340
cacttcaaac ctctccttac agcactcaag ctgctttagt agtttttccg caaaatcttg
                                                                     2400
gggatcatga atcaagtgaa tggctgaaaa gttaaacacc tetggttttt tettetteet
                                                                     2460
gtgtttettg agcaetttea ttgeetttte caaettttte ttgtttttgg aaettttett
                                                                     2520
ccctgtagca tattgtacta gcaggtctct tgctgttggt ccatcatcct cagattcgga
                                                                     2580
gtcactgtcc tgtttttcat cttcatcttt cccaagaaag aatgtcaaag cggcaactaa
                                                                     2640
tatcttggtg accttagaga aacatgcagt tgtgataaca ttgacagttt ttgcatcatt
                                                                     2700
ccagatgttc cttctgtaga gttcaatcat tacatctaaa gacatcttgg ctgcggttgc
                                                                     2760
attgctatct cttaacatgg tgtacatgaa attttgcaat actacattca ctttattgct
                                                                     2820
cttgtgtttt gcatttatat tettgatate agteacaata tgtgtgtata aagtettteg
                                                                     2880
cagaagttta tcatggcaac gaaaaagttc aaagaagagt tctagcaggc ttgatggatt
                                                                     2940
gatgagattc ttatttctca gcaagatcaa agctttgcaa aatgtcattc gcagatctgg
                                                                     3000
atccgatacg gtatgatt
                                                                     3018
```

```
<210> 5547
<211> 1428
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1427)...(998)
<223> similar to gi4186185 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5547
atttctgcta cagtcatgca ttctttaaca tcttgtttat tagcaaaaat cagcttttca 60
ccaaggaaga aataccttta ttaggagtct aggcatgtca gaaaaaccca gttcagtcac 120
agaaaaggag gcaaatattg gtacagagca agaatccaag tgtgaaaata aaacctccat 180
ctaaatatcc taacagaaat gctgctgaat ttagcccagg tgaaacttct gaaagctcct 240
ggtgaaatga gatttttgca taaagagaga gctctccagc actgctgcat ctgagcttct 300
tataaagtga cgggtcttgg ccagcagtag aggaagagat aaaggggatg tctcatcacc 360
caagcaaggt cgtctgtgt caagtgagag aagaacctta gggttttgga cagagtaaac 420
```

```
tggggcagca gagggaaaat ggctgaggaa acacaacgtc tagggccgtg tgtggcataa
                                                                      480
tgtggaqqqq tctgtgcagt ctggtgtgag tgcatctcca ggaggtcttg ggaaacactg
                                                                      540
gcattccttc ctgaggccat tttggttctg ttctgacttc attcagagca gaactgccaa
                                                                      600
                                                                      660
tgtccagcgc caagtcctgg atcataatta gctgagtgga atgcagtagc caccctatga
ctcccatacc tcttcctttc tggagcagtc acttttctca gaccaagtga gatcttaccc
                                                                      720
agtaggggcc caatctagaa atcactccca ccttcatatg agcaccaggt ggagagaatc
                                                                      780
atteteatga eteaaagett tagatetega teeteagatg atgtteettg gacagaagat
                                                                      840
caqtctgaag ttatctgtgt caagagtagc tggcactgcc catgggtaat gggcccaagc
                                                                      900
gatgtgatgc cgcagctctc ccaaagaaga gctctctctg ctttcacagg caggagagga
                                                                      960
ggaaatgagg caggetteaa ggtagteaat gecaettaat tetteeateg aatttgegag
                                                                     1020
ctgctgagaa gagcatcaat cttctcctcc tctgctgatc ctttatctac cttactcctg
                                                                     1080
tatgctagca actgttgacg atccttcagg tcccggtagg tatcaatgac gacatcatgg
                                                                     1140
cacttgaact tagtggctaa gttcaacttc gtgtccacat cttccaccag attgacatac
                                                                     1200
teetgtaata tetgeacagg ggeattgtte ttgtgcaaaa tttegacaac eegatggaag
                                                                     1260
ccaatqqqtq ctctcttctt qqtataqccc aqccagttct ttgtggtgaa taqqqcatct
                                                                     1320
acatcattcc aggctcgaag cttggcacga gcagccaggg ctgtcagcac atactgttta
                                                                     1380
totgggatot taaatgtott ottoaggttg acgggactgc tgaatgco
                                                                     1428
```

```
<210> 5548
<211> 397
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(285)
<223> similar to gil408209 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5548
atgggcacat caaacattac aacgaatgtt gaaaagacaa aaagggggta taggaggcca 60
actaccacct caatcaaaac tacatttagc cttatttact ttaaaatttt tgactcctgg 120
tacggatggt aagactccag cagaaagaca ttggcaagtg ttagaggaaa agaggaaagt 180
ttatctgaaa gtgttacgga aatccccaga agaaggacaa tggaaaaggcc cggtggattt 240
actgacatgg ggaagagggt atgcttgtgt gtttacagga gattgacaag ccatgtgggt 300
gccctcaagg tgcttgcaac cctggaatgg gagactggag aaacatgggg tggccaacca 360
tgggcccagt ccctccggta tgagccatga gtcagct 397
```

```
<210> 5549
<211> 1255
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (9)...(331)
```

<223> similar to gi4240255 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5549
ggcaggcgac catcogggtg aagtgtctga ccgctcagca gcagtcaggc gagcgtctct
                                                                       60
cagetttegt gttgeggetg gaagtgetge tgeagaagge catggagaag gaggeeetgg
                                                                      120
ccagageate egeogacege gtgegeetga ggcagatget caccagggee cacettactg
                                                                      180
agectetgga tgaagcactg aggaagetga gaatggeegg gaggteteca agtttettgg
                                                                      240
agatgetggg getegttegg gagtetgagg catgggagge cagtetagee aggagegtga
                                                                      300
gageccagae acaggaaggg geeggtgeee gggetggtge ceaggetgtt geeagageea
                                                                      360
gcactaaagt agaggeggte ecaggaggte etggteggga gecagaggge etectecagg
                                                                      420
caggaggcca ggaggctgag gagctcctcc aggagggct caagcccgtc ctggaggaat
                                                                      480
gtgataacta ggttggggct ggggaggcag cccagcgcga gtcctccccg ggcaaatagg
                                                                     . 540
etcegaggge eceggggeet ecteteetee tetcaggeag cagggeeetg gagacaggeg
                                                                      600
gaggegggge cagggeeggt cecteacec acategggat eggggeeeec caetteeeee
                                                                      660
caaggggccc tgcccaccac caccttcccg gtgacccaga tgaccacatt taataccaaa
                                                                      720
tggggtgggg ggaggcgccc ctccagtgcc aggggcacgt gctgtgagct tcctgggagc
                                                                      780
ccaggttgtg ctcactgctc teccgtateg tgagcaccac etctgettte eetgegtaga
                                                                      840
tetaggecag gggetgettg tttttgtgga geegtgtgtg ttettetetg ageageteet
                                                                      900
ccccagagga ccccagcgca gtcccgggag atggcggaaa gaaggcacca gggcacagtg
                                                                      960
gacactcatc ccgtgacagc gatggtgacc atgactgtgg gagaaagaac aggacccggg
                                                                     1020
atggagtggg gctgtctgag tttccccagt gaactttgtg ctttggcgtt ccaccctgt
                                                                     1080
tgttacttgt tactgagttt cctagacctg gggtgggtgt tcccccagga ggagggggt
                                                                     1140
ecegacetgt gteetgtggt ggeeatttge agettetgtg ttgtgattee ettetettea
                                                                     120Ò
acggtttcaa gtacatatct ctcaataaat ttcattcagt gttccaaaaa aaaaa
                                                                     1255
```

```
<210> 5550
<211> 2009
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (46)...(1614)
<223> similar to gil293680 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5550
egggateaat ttgatttgac agteggtata aetgateetg agaagatgge gtegggtggt
                                                               60
ggtggctgta gcgcttcgga gagactgcct ccgcccttcc ccggcctgga gccggagtcc
                                                              120
gaggggggg ccgggggatc agaacccgag gctggggaca gcgacaccga gggggaggac
                                                               180
attttcaccg gcgccgcggt ggtcagtaaa catcagtctc caaagataac tacatccctt
                                                              240
cttcccatca acaatggctc caaagaaaat gggatccatg aagaacaaga ccaagagcca
                                                              300
caggatetet ttgcagatge cacagtggag ctateettgg acageacaca aaataateag
                                                              360
aagaaggtgc tagccaaaac actcatttct cttcctcctc aqqaaqccac aaattcttcq
                                                              420
480
acagteggta taactgatee tgagaagata ggggatggta tgaatgeata tgtaqeetae
                                                               540
```

```
aaagttacaa cacagacaag cttaccattg ttcagaagca aacagtttgc agtaaaaaga
                                                                      600
agatttagtg actttctggg tctttatgag aagctttccg agaagcactc tcagaatggc
                                                                      660
ttcattgtcc ctccgccccc ggagaagagc ctcataggga tgacaaaagt gaaagttggg
                                                                      720
aaggaagatt cttcttctgc agaatttctt gaaaaacgga gggccgcttt agaaaggtac
                                                                      780
cttcagagga ttgtaaatca tcctaccatg ttacaggacc ctgacgtcag agagttcttg
                                                                      840
gaaaaagaag agctgccacg tgccgtgggt acccagacat tgagtggtgc tggtctcctc
                                                                      900
aagatgttca acaaagccac agatgccgtc agcaaaatga ccatcaagat gaatgaatca
                                                                      960
gacatttggt ttgaggagaa gctccaggag gtagagtgtg aggagcagcg cttacggaaa
                                                                     1020
                                                                     1080
ctgcatgctg ttgtagaaac tctagtcaac cataggaaag agctagcgct gaacacagcc
cagtttgcaa agagtctagc catgettggg agetctgagg acaacaeggc attgtcacgg
                                                                     1140
gcactetece agetggetga ggtggaagaa aaaattgage ageteeacea ggaacaggee
                                                                     1200
aacaatgact tetteeteet tgetgagete etgagtgact acattegeet eetggeeata
                                                                     1260
gtccgcgctg ccttcgacca gcgcatgaag acatggcagc gctggcagga tgcccaagcc
                                                                     1320
acactgcaga agaagcggga ggccgaggct cggctgctgt gggccaacaa gcctgataag
                                                                     1380
ctgcagcagg ccaaggacga gatcctcgag tgggagtctc gggtgactca atatgaaagg
                                                                     1440
gacttcgaga ggatttcaac agtggtccga aaagaagtga tacggtttga gaaagagaaa
                                                                     1500
tccaaggact tcaagaacca cgtgatcaag taccttgaga cactccttta ctcacagcag
                                                                     1560
cagctggcaa agtactggga agccttcctt cctgaggcaa aggccatctc ctaatggacc
                                                                     1620
aaggacccca gagcccacct gtgtgacgct gcctttttat acactgtcct cctccacctt
                                                                     1680
gatggacccc tagtgatgca teetgeetag getggaetta acceetteet eeetgteeee
                                                                     1740
acgaccaact gtccccagtt actctaaccg ttatttcatt tagcttccat atatattttc
                                                                     1800
ttacctaaga gaatagtttc ctgctttaag caaaagacct acaataggtg:gtggaattat
                                                                     1860
gggatggggt ggagtattga tataaatata taaatacaaa tgtatatttt tcaggatgtg
                                                                     1920
gtttaggaac tgggaataac gttttctgtt actcctgatg gtgccatgaa aaggttatgt
                                                                     1980
aataaaatat tttaaaatca aaaaaaaaa
                                                                     2009
```

```
<210> 5551
<211> 812
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3) ... (599)
<223> similar to gi4680697 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5551
ctggaggagg aattagcttg aagcatggcg atgaaatcta cattgctcct tcaggagtgc
                                                                       60
aaaaggaacg aattcagcct gaagacatgt ttgtttgtga tataaatgaa aaggacataa
                                                                      120
gtggaccttc gccatcgaag aagctaaaaa aaagccagtg tactcctctt ttcatgaatg
                                                                      180
cttacacaat gagaggagca ggtgcagtga ttcataccca ctctaaagct gctgtgatgg
                                                                      240
ccaccettet etttecagga egggagttta aaattacaca teaagagatg ataaaaggaa
                                                                      300
taaagaaatg tacttccgga gggtattata gatatgatga tatgttagtg gtacccatta
                                                                      360
ttgagaatac acctgaggag aaagacctca aagatagaat ggctcatgca atgaatgaat
                                                                      420
acccagacte etgtgcagta etggtcagac gtcatggagt atatgtgtgg ggggaaacat
                                                                      480
gggagaaggc caaaaccatg tgtgagtgtt atgactattt atttgatatt gccgtatcaa
                                                                      540
tgaagaaagt aggacttgat ccttcacagc tcccagttgg agaaaatgga attgtctaag
                                                                      600
ccaaaagaaa gtctaattat atacagagat aaagctaaac gtaattatta tttaaatgaa
                                                                      660
agctattttt ttaaataaat tgaaattttt catgatgcta ctaatttgcc actaaatact
                                                                      720
```

<210> 5552
<211> 2403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2392)...(1576)
<223> similar to gi2l14473 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5552 tttttttttt ttcaccgggc taggtctgct ttttattggc cacgcatcca gccgccagcc tcagggcaca cacctggcag ggggcaggct cgggtaggct gccctcgctg ggtgggcagt 120 gagggggcag cggctgctgg gtgtcaccct gcagcccctc aggtggacct gtattgtccc 180 cagggeetge ceaegetggg cagetggeae tgggaggggt tttetgttga tgtgatggee 240 aagtttcagc tgcagggcag aggcctggca gtggcagcaa aggcagaccg cccccaactc 300 caacttcagg ggctggacat gctggaacgg gggccagacc ccatgggagg ggaccctggc 360 etgecatgge actgectgee agettacece tgeccaggge ceccaactea gecaceteca 420 agcagtaaag acttgcaaag cattgcattt tgattaaacc ttgctgggct gaagggcagg 480 cagagetgtg gtggacactg gcaggacgca gcaccccccg actggccctt ggcaggctgc 540 accgggcgca tgcgggtgtg ggccagggtt gcctttagga agcaggtggg aggctggcac 600 gtgcaggcgg tccaggaggg caccaggcct ggcagggcac tggtgcctgt cgggttccca 660 gccacaacac cccaagaagg ctccaggagg gccccggctg ggtaaggcac ggagttttgg 720 tttccggggc ccagtcccag cctggccccc agaagagcct ctcttggcag aatggcagca 780 tgtcctgtgg cctgggctct ctcacttggc cttgggcctg ggcctgaggc cttactggat 840 cacacacagt ttetttgttt tattateate agaateaggg ggaacetett eetggeteet 900 ggagggacgc ttetteette getteeeggt eccetttgag geeeggeeec gggeeetggg 960 gagtgtgccc gaccccgagg agtcggtcac cgcatcctcg gagaaggact tgtccaggga 1020 tgtgtdcagt gcggactctg gggccgtgtc ctcctcgtcc tcgtcctcat ccccacctgg 1080 gcctgctgca gggggtctgg caccacggct gtggacagcg tcctccagcc cctcacttgt 1140 getgteggee teggeetgga ggaegeeeag caaggaegtg ggateettgg catettqeet 1200 tgaacttccg gctgcagggg gctggttgct ggagaacttg aggggcttca gggcctgagc 1260 atotoccaga gtoaccggcc aggccccctc caagggctgg gggcactggg gatoctcagt 1320 ggttaggaca tegetggcat ceacatacea ggaagaaege etetecaggg geeggggace 1380 accetectee aactgeteea gggtgggetg agggeegggg gteaeggegt etaeaaggte 1440 ccagccccgg gactcgctgg ctgttgtagc atcaaggccg ggctcagagg cgggacagcg 1500 cgtgctgccc acggggtctc ctgcagggtt actggtggcc acaggctctg tggctcttgg 1560 gggatccatg gaggetgeet tgetgeecee gteggtgtee eegeggeece gggetgtett 1620 cegcagetgg aagccettee tgatgteage cagcagggea tegatgacae acaceteete 1680 etgetteeeg ggeeeettee tgacaggett ceegteetet ceeegaggee geegegeete 1740 etecteegee agetgetget tecteetete tgeettegee geetgeteet teeggteett 1800 gttctccttc agggcgcgga ggaaaaggtc ccggaaagcc ttcatggtgc tgaacgtgtc 1860 ctccagggac agetgetggg cgtcctcaca caggtagtcg gccagctccc gttqcttctq 1920 ctcgatggcc tcaaacagct cgtccagtgc ccggaaggcc gagatgctgg cctggaggcg 1980 cteggtgtac tgctcctgga ccteggccac ggaggcagac accttccgct cggtctccag 2040 aagettette aggttggage tggeetetga geggatgate tecaggttga tecetgetge 2100

```
ttgcgagggc tgttccaggt cccggggcag ctgcaggagg tcggggtggc tcttttccgc 2160 ttcctccagc acgtggtgca gcagcgtcac gcggttctgc tgggacttgg tctccgtgag 2220 cttcagcaat gtgctgatct tgaagccgtc ggcgtcaccg gtgtggctgc cgtagttgag 2280 gaagttccca attctcagga tcagctggca gaagatgggc agctggcggc tggtgagcag 2340 cctttcgcag gcagccagca ccagctgggc cttgggccgc accatgtcca gcacggcggc 2400 cgc
```

```
<210> 5553
<211> 949
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (946)...(898)
<223> similar to gi3157938 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5553 gatcacagec cetacecaeg tgeeteteca gtacategge eccaaceage eceggaagee 60 tgggctgcct ggccagcctg ctgtaagcta agaacccacc cacagcagcc ctcgggggtg 120 teactgette etggaggtte aggagaeece ggacaeetgg gaeetgtgtt eetgageeeg 180 tectgacate tgtgttette etgteagete caegeceggg ceeetggace aeggggteca 240 ceteteetet gteeggaeea tttattgggg actttttget cageaetgta ggaggaaaga 300 aggaaggagg gatggaagcc tetteetetg etteteetgt ceetagaace gtaaageeea 360 gacgtcctgc ttcccactgg gaccctcaat gataacaggg tcagtgactg actctgaggc 420 agcaaggaca gaggagaggt ggaccccgtg gtccaggggc ccgggcgtgg agctgacagg 480 aagaacacag atgtcaggac gggctcagga acacaggtcc caggtgtccg gggtctcctg 540 aactccagga agcagtgaca cccccgaggg ctgctgtggg tgggttctta gcttacagca 600 ggctggccag gcagcccagg cttccggggc tggttggggc cgatgtactg gagaggcacg 660 tgggtagggg ctgtgatccg atcagtgccg aggtaggact ggagggcagg gggcacgagc 720 actgageegt cettetgetg gttactetee aggagegega tgagaaggeg ggggacagea 780 caggoggtgg cgttcaccgt gtgggcaaac tgcagctccc cagcctcggt ctggaacatg 840 atgtggagge ggeggetetg gaagtetgtg cagttggaag caetggtgae etetecaaag 900 cggcctcggc ctggcatcca ggcctcaatg tcaaacttgc gctcgtgcc 949

```
<210> 5554
<211> 720
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(175)
<223> similar to gi5730484 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5554 gctgataata gaaagatgtc tcggaaggag aaagatgaaa gaatcttgtg gaagaagaat 60 gaagttgctg attatgaagc tacaacattt tccatcttct ataacaacac tctgttcctg 120 gtcgtggtca ttggtgcttc cttcttcata ttgaagaact tcaaccccac agtgtatcct 180 tttcaaggtt gattatcttt tttagaagtc aagaaacagt agttcatttt ggttttgact 240 300 tgtctggata ttttagtgga aagaaaaact gctctgggag tcagtccatt aaatagtgct 360 gactttagat aactttctgg acatttaaaa taacagctat tggtttaaga ttcttttaag tttatgaatt atgactgtat gataaagtat tacaaagtag tctatgggaa tctgtgtcct 420 tgcctcctta aaaaaaagct ccaaagagcc aaagcaaacc tgtcattttt gatagcttct 480 gaaataataa gcccctgtac ctgttatttt tgggctctgg gggttgggtg gatggccaat 540 600 gcagttaaat aggttcattc cagtgtatct taatagtgtt tcaagctgct gttaagttga 660 gcttttgggc aagaatcagt cttctcttat taatttatta aagatgttat ccaggaatgt gcagccaaga ttttaacaat tggtgattat gatgtaataa aatatcagaa accatccaaa 720 .

```
<210> 5555
<211> 3163
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) . . . (2759)
<223> similar to gi5726289 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5555
atggggttat tcagaggttt tgttttcctc ttagttctgt gcctgctgca ccagtcaaat
                                                                       60
actteettea ttaagetgaa taataatgge tttgaagata ttgteattgt tatagateet
                                                                      120
agtgtgccag aagatgaaaa aataattgaa caaatagagg atatggtgac tacagcttct
                                                                      180
acgtacctgt ttgaagccac agaaaaaaga ttttttttca aaaatgtatc tatattaatt
                                                                      240
cctgagaatt ggaaggaaaa tcctcagtac aaaaggccaa aacatgaaaa ccataaacat
                                                                      300
gctgatgtta tagttgcacc acctacactc ccaggtagag atgaaccata caccaagcag
                                                                      360
ttcacagaat gtggagagaa aggcgaatac attcacttca cccctgacct tctacttgga
                                                                      420
aaaaaacaaa atgaatatgg accaccaggc aaactgtttg tccatgagtg ggctcacctc
                                                                      480
cggtggggag tgtttgatga gtacaatgaa gatcagcctt tctaccgtgc taagtcaaaa
                                                                      540
aaaatcgaag caacaaggtg ttccgcaggt atctctggta gaaatagagt ttataagtgt
                                                                      600
caaggaggca gctgtcttag tagagcatgc agaattgatt ctacaacaaa actgtatgga
                                                                      660
aaagattgtc aattetttee tgataaagta caaacagaaa aageateeat aatgtttatg
                                                                      720
caaagtattg attotgttgt tgaattttgt aacgaaaaaa cocataatca agaagotoca
                                                                      780
agcctacaaa acataaagtg caattttaga agtacatggg aggtgattag caattctgag
                                                                      840
gattttaaaa acaccatacc catggtgaça ccacctcctc cacctgtctt ctcattgctg
                                                                      9 Ò O
aagatccgtc aaagaattgt gtgcttagtt cttgataagt ctggaagcat ggggggtaag
                                                                      960
gaccgcctaa atcgaatgaa tcaagcagca aaacatttcc tgctgcagac tgttgaaaat
                                                                     1020
ggatcctggg tggggatggt tcactttgat agtactgcca ctattgtaaa taagctaatc
                                                                     1080
caaataaaaa gcagtgatga aagaaacaca ctcatggcag gattacctac atatcctctg
                                                                     1140
ggaggaactt ccatctgctc tggaattaaa tatgcatttc aggtgattgg agagctacat
                                                                     1200
```

```
teceaacteq atggateega agtaetgetg etgaetgatg gggaggataa caetgeaagt
                                                                   1260
tcttgtattq atgaagtgaa acaaagtggg gccattgttc attttattgc tttgggaaga
                                                                   1320
gctgctgatg aagcagtaat agagatgagc aagataacag gaggaagtca tttttatgtt
                                                                   1380
tcagatgaag ctcagaacaa tggcctcatt gatgcttttg gggctcttac atcaggaaat
                                                                   1440
                                                                   1500
actgatetet cecagaagte cetteagete gaaagtaagg gattaacaet gaatagtaat
gcctggatga acgacactgt cataattgat agtacagtgg gaaaggacac gttctttctc
                                                                   1560
atcacatgga acagtctgcc tcccagtatt tctctctggg atcccagtgg aacaataatg
                                                                   1620
gaaaatttca cagtggatgc aacttccaaa atggcctatc tcagtattcc aggaactgca
                                                                   1680
aaggtgggca cttgggcata caatcttcaa gccaaagcga acccagaaac attaactatt
                                                                   1740
acagtaactt ctcgagcagc aaattcttct gtgcctccaa tcacagtgaa tgctaaaatg
                                                                   1800
aataaggacg taaacagttt ccccagccca atgattgttt acgcagaaat tctacaagga
                                                                   1860
tatgtacctg ttcttggagc caatgtgact gctttcattg aatcacagaa tggacataca
                                                                   1920
gaagttttgg aacttttgga taatggtgca ggcgctgatt ctttcaagaa tgatggagtc
                                                                   1980
tactccaggt attttacagc atatacagaa aatggcagat atagcttaaa agttcgggct
                                                                   2040
catggaggag caaacactgc caggctaaaa ttacqgcctc cactgaatag agccqcqtac
                                                                  2100
ataccagget gggtagtgaa eggggaaatt gaagcaaacc egecaagacc tgaaattgat
                                                                   2160
gaggatactc agaccacctt ggaggatttc agccgaacag catccggagg tgcatttgtg
                                                                   2220
gtatcacaag teccaageet tecettgeet gaccaatace caccaagtea aateacagae
                                                                   2280
cttgatgcca cagttcatga ggataagatt attcttacat ggacagcacc aggagataat
                                                                   2340
tttgatgttg gaaaagttca acgttatatc ataagaataa gtgcaagtat tcttgatcta
                                                                   2400
agagacagtt ttgatgatgc tcttcaagta aatactactg atctgtcacc aaaqqaqqcc
                                                                   2460
aactccaagg aaagctttgc atttaaacca gaaaatatct cagaagaaaa tgcaacccac
                                                                  2520
atatttattg ccattaaaag tatagataaa agcaatttga catcaaaagt atccaacatt
                                                                  2580
gcacaagtaa ctttgtttat ccctcaagca aatcctgatg acattgatcc tacacctact
                                                                   2640
cctactccta ctcctactcc tgataaaagt cataattctg gagttaatat ttctacgctg
                                                                   2700
gtattgtetg tgattgggte tgttgtaatt gttaacttta ttttaagtae caccatttga
                                                                  2760
2820
atgtaagtaa aggatattto tgaatottaa aattoatooo atgtgtgato ataaactoat
                                                                  2880
                                                                  2940
aaaaataatt ttaagatgtc ggaaaaggat actttgatta aataaaaaca ctcatggata
tgtaaaaact gtcaagatta aaatttaata gtttcattta tttgttattt tatttgtaag
                                                                  3000
aaaatagtga tgaacaaaga teetttttea taetqataee tqqttqtata ttatttqatq
                                                                   3060
caacagtttt ctgaaatgat atttcaaatt gcatcaagaa attaaaatca tctatctgag
                                                                  3120
tagtcaaaat acaagtaaag gagagcaaat aaacaacatt tgg
                                                                  3163
```

```
<210> 5556
<211> 6772
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (188)...(4880)
<223> similar to gi3043584 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5556

cagctgccag gtcgagggat gtactcgaac ctataatict tcacagagta ttgggaaaca 60
catgaagaca gcacacctg accaatatgc tgcatttaaa atgcagcgca aaagtaaaaa 120
aggtcagaaa gctaacaact taaatacacc aaataatgga aagtttgttt atttttgcc 180
atcaccggtg aacagctcaa atccatttt tacatcacag accaaagcca atgggaatcc 240
```

```
tgcttqttcg gcccaqttqc agcatgtctc gccacccatt tttccagctc atttagcaag
                                                                      300
tgtgtcaact ccattgttgt cctcaatgga aagtgtcata aatccaaata taacttctca
                                                                       360
ggataaaaat gaacaaggtg gtatgttatg ttcccaaatg gaaaatttac ctagtactgc
                                                                      420
cttgccagca caaatggaag atctaaccaa aacagttctg cctttgaata ttgacagagg
                                                                      480
ctcagatect tteetttett taeetgeaga aagtagttea atagatetet teeetteace
                                                                       540
agcagatagt gggactaatt ctgttttttc ccaactggaa aataatacaa atcattattc
                                                                      600
ctcacagatt gaaggaaaca ctaattcctc ctttctaaag gggggtaatg gtgaaaatgc
                                                                       660
agtttttcct tcacaagtga atgttgcaaa taacttcagt agcaccaatg cccaacagtc
                                                                      720
tgcacctgaa aaagttaaaa aagaccgtgg gcggggccaa actgggaagg aaagaaaacc
                                                                       780
                                                                       840
taagcacaac aaaagggeta aatggeetge aattateaga gatgggaaat ttatetgtag
caggigttac agggettita ctaateecag atcactgggt gggeactiat ecaagegate
                                                                       900
ttactgtaaa ccactggatg gagccgaaat tgctcaagaa cttctacaga gtaatggaca
                                                                      960
                                                                      1020
geettetett ettgecagea tgattetete cacaaatgea gtaaatttge ageagecaca
acaatctacc ttcaatccag aagcatgttt taaagatcca tcatttctac agcttcttgc
                                                                      1080
tgaaaatcgc tcgccagcat ttttaccaaa tacatttcct cgatctggtg tgactaactt
                                                                     1140
                                                                      1200
taataccagt gtcagtcaag aaggtagtga aattattata caggctttgg aaactgctgg
catteceagt acatttgagg gtgeegaaat gettteteat gttteaacag gttgtgtete
                                                                      1260
tgatgcatca caagtaaatg caacggtgat gccaaatcca actgtaccac ccctgttgca
                                                                      1320
cactgtatgc catccaaaca ccttgctgac caaccagaat aggacgtcaa actccaaaac
                                                                      1380
ttcctccatt gaggaatgta gcagcttgcc tgtttttcca acgaatgact tactactgaa
                                                                      1440
gactgttgaa aatggtttgt gctctagttc atttcctaat tctggtgggc catcacaaaa
                                                                      1500
ttttaccagt aacagttctc gtgtttctgt tataagtggt cctcagaaca caagatccag
                                                                      1560
tcatttaaat aaaaagggaa acagtgcttc taagagaaga aagaaagttg ctcctccact
                                                                      1620
                                                                      1680
aattgcacct aacgcttccc aaaacttggt aacaagtgac ttaacaacaa tgggactcat
                                                                     1740
agcaaagagt gttgaaatcc caactactaa ccttcattca aatgtaattc caacttgtga
                                                                     1800
acctcagagt ttggtggaaa atctaacaca gaaattaaat aatgttaaca atcagttatt
tatgactgat gtaaaagaga atttcaaaac cagtcttgag tcccatacag tgttagcccc
                                                                      1860
tttaacatta aaaactgaaa atggtgattc ccaaatgatg gctttgaatt catgcacaac
                                                                     1920
                                                                      1980
ttcagtaaat tctgatttgc agatttctga agacaatgtt atacaaaact ttgaaaagac
tettgaaatt attaaaactg etatgaatte teaaataett gaggtaaaaa gtggatetea
                                                                      2040
gggtgctggt gaaacttcac aaaatgctca aataaattat aacattcagc ttccttcagt
                                                                     2100
aaacactgtg caaaataaca aattacccga ttcttctccg cttttcctcc tttataagtg
                                                                      2160
tcatgccaac agagagtaac attcctcagt ctgaaggtat cacataagga ggatcagata
                                                                      2220
caggagattt tagaaggett acagaaatta aaattagaaa atgacetate cactecagea
                                                                      2280
teccaatgtg tactgataaa tacatcagtg acactgacte ecaegeetgt taaatcaact
                                                                      2340
gcagatatca cagttattca gccagtttct gaaatgataa acattcaatt taatgacaaa
                                                                      2400
gttaataaac cctttgtgtg tcaaaaccaa ggctgtaact acagtgctat gacaaaggat
                                                                      2460
gcactattta agcactatgg taaaattcat caatacactc cagaaatgat tcttgaaatt
                                                                      2520
aagaagaatc aattgaaatt tgctcccttt aaatgtgtag tacctacatg tacaaaaaca
                                                                      2580
tttacaagaa attctaacct ccgggcacac tgtcagttgg tgcatcattt tacaactgaa
                                                                      2640
gaaatggtaa agttaaaaat taaaaggcct tatggaagaa aatctcagag tgaaaatgtg
                                                                      2700
ccggcctcac gaagtacaca agtgaaaaaa cagctagcta tgacagagga aaataaaaag
                                                                      2760
gaateteage etgetttaga attgagagea gagaeecaaa ataceeacaq taatqtaqea
                                                                      2820
gtgatcccag aaaaacaact tatagaaaaa aaaagtcctg acaaaacaga aagttcttta
                                                                      2880
caagtgatta cagttacttc agaacaatgt aatacaaatg cactcacaaa cacacaaacc
                                                                      2940
aaaggacgga agattaggag gcataaaaaa gaaaaggagg agaaaaaacg aaagaagcca
                                                                      3000
gtttcccaat cccttgagtt tccaacaaga tacagtcctt acagacctta tcgatgtgtt
                                                                      3060
caccagggat getttgetge etttaegata cagcaaaatt tgatteteca ttaccagget
                                                                     3120
gtacacaaat cagatctacc tgcattttca gcagaggtcg aagaggaaag tgaagctggt
                                                                     3180
aaagaaagtg aagaaactga aactaaacaa actttgaaag aatttcgatg tcaggtaagt
                                                                     3240
gactgttctc gaattttcca agcaattact ggcctaatac aacactacat gaaacttcat
                                                                     3300
gaaatgactc ctgaagaaat tgaaagtatg actgcttcag tggatgttgg gaagtttcca
                                                                     3360
tgtgaccagt tagagtgtaa atcttcattt actacatatt tgaactatgt tgttcatcta
                                                                      3420
gaggcagacc acgggattgg actaagggca agtaaaacag aagaagatgg tgtatacaaa
                                                                     3480
tgtgattgtg aaggetgtga eegtatatat geaaceeggt egaateteet eegacacatt
                                                                     3540
tttaataagc ataatgacaa acataaggct catttgattc gtccaagaag attaacacca
                                                                     3600
ggccaggaaa atatgtcaag caaggcaaac caagaaaaat caaagtctaa acatcggggg
                                                                     3660
```

acgaagcaca gcagatgtgg aaaggaagga ataaaaatgc ccaagaccaa acgaaagaaa 3720 aaaaataatt tagaaaacaa gaatgcaaag attgtgcaga ttgaagaaaa taagccttat 3780 tctctgaaac gtgggaagca tgtatattct ataaaggcta gaaatgatgc cctgtctgag 3840 tqtacaaqca qatttqtaac ccagtatcca tgtatgataa agggatgtac ttcagttgtt 3900 acaagtgaaa gcaatataat tagacattat aagtgccata aattatctaa ggcatttaca 3960 tcacaacacc gaaatcttct tattgtattc aaacggtgtt gcaactcaca agtaaaggaa 4020 acgtctgagc aagaaggtgc taagaatgat gtgaaagatt ctgacacgtg tgtatcagag 4080 agcaatgata attcaagaac aacagctaca gtttcacaaa aggaagttga aaaaaatgaa 4140 taagatgaaa tggatgaact aacagaattg tttattacaa aattaataaa tgaagatagc 4200 acaagtgtag agacccaagc taatacttct tcaaatgtaa gtaatgattt tcaggaagat 4260 aacctctgcc agtcagaaag acaaaaagca agtaatttga agagagttaa taaggaaaaa 4320 aatgtctcac aaaataaaaa aaggaaagtt gaaaaagctg aaccagcatc agcagctgag 4380 ttaagtagcg tgcgtaaaga agaagaaact gctgttgcca ttcaaaccat tgaggagcat 4440 cctgcatctt ttgactggag ctcttttaag ccaatgggat ttgaagtatc atttctgaag 4500 tttcttgagg agtctgcagt gaagcagaag aaaaatactg acaaagacca tccgaatact 4560 ggaaacaaaa aaggatccca ttcaaattca agaaaaaata ttgataagac tgctgtgact 4620 agtggaaatc atgtatgtcc ttgtaaagaa agcgaaacgt ttgtacagtt tgccaatcca 4680 tcacagcttc agtgcagtga taatgtaaaa attgttttag acaagaatct taaagattgc 4740 actgagettg tettaaagea aetteaggaa atgaaaeeta eegteagtet gaaaaaaett 4800 gaagtacatt caaatgatcc agatatgtct gttatgaaag atatcagtat aggtaaagcc 4860 acaggcagag gtcagtactg ataattaatg tagtataaat acatcattta ccattttatt 4920 ttaaatagga agccatcaag catgctagaa ttgtgaaact ttcattatat ttttttgttg 4980 ttgacatgaa ttaacctggc caaaaacaaa aaagaaaaaa aaaacatgac atttgtcatg 5040 taaaactttt ttttatccct atgggacttg aggaacagaa tcagtacttc agttattgta 5100 aatagtgagc taaacctcaa atttctatca cccagttgcc cttttcatga actaaacaat 5160 tatetgtgtg attggtatgt tteaceaggt caetgeteat gtataaeagt actetttatt 5220 tgtagatacc ttttttgtat atatttatta ttgtaaatca tgtgctgcca ccagcagtct 5280 gtaagtetaa aetattaaat gacacattta tatttggaat tttaattttt aactaagega 5340 tcaagttttt taaattgttc ttttattgtt ttaaattaag aactttttga actaaaacca 5400 gaaactetge catagiteat igattittae atgaaacatt tattiacaaq atqatateaa 5460 5520 gattactttt cacaaaatag gcacattata tcaacacttt gctctgcttt gtaaatttgc catecaggat titggggtgg tattcatgtg aaattaaage agatteteta geagtiteet 5580 atagctacag tttttttttt tcattgcttc taattggata tagttactat gagtccatga 5640 aatacaatgg aaatgtgaat aaagaattta ctacattgaa gattttaaac atttggtatt 5700 aaaaaaaaat cctttgtgaa tgtgatagaa aactagtagt gtggagcagt gtaaatattt 5760 gaggtggtga tttgtgaagt agcccagtat tgccttaaat aaaatcacat ttcatttctt 5820 5880 tttatagatt ggtgtatagc tttaaactgt ataaagtttt gtggaaagat tttttaaac 5940 atttttataa atcttaaaat tgatatcatc aaagtgagcc catcttgtgt ttataaaatá 6000 caagagteet taacatttat aattacatag ataaaacact ttetataagg aagttggatg 6060 ttttgatttt actgtttata gatgttagat tgtacagatt tgtctgtatt tctcaccata 6120 tctaatgata ctttttcat tagattggtc ttcaagaaca gtattagtta taattatttt 6180 ggttattcag tatatagtta gctcttacag tttagcttta ttcaccatat ttatactqtq 6240 gattcacagc gagaggtaga ggttattcca ggagagttga tgaccttcat ttaaagtcca 6300 actaaaatca gtagtagaaa cataagaaaa catctttgca atatttactt ttgtttctgt 6360 ttgccgtaaa tagtaacatt gtttttttt attttgtgtt tgttataaaa cagttgcatt 6420 cacaatatta ttggcctgag atattgatga tattgtgatg gtatgaaaat gtgtacattc 6480 cctgtgcaac atcagatttg caggaaaaat gaagcactta ctgaaatcgc tggtactctg 6540 aataaataäg catggtcaag gagtgaacta ttttcttttg gaaatttctt tttaattttt 6600 attattaaag tattttattt ttagggcctt ttgggtttta ttgaatagtt catttcacct 6660 gtttaagact tactaccaat aagcataaaa cctgacacgt taaaatccct gccctttggt 6720 gagcccactg ttatttatta aaataaaagt tattttatgg gtgattaaaa aa 6772

```
<210> 5557
<211> 2112
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (610)...(1245)
<223> similar to gi180189 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5557
tgaagatcca catcttccgg ataaaatcca ggtcttttct ccaatatatg tcttcctgaa
                                                                       60
gatccacgtc ggccagaaaa tccatgtctt ccagaaaatc catgtcttcc agtaacctcc
                                                                      120
cagtetteca gaaaatecae gtetteecaa caatecaagt etteeggata atttgggtet
                                                                      180
tcctgaaaat ctacgtcttc caaaaaagcc atgtcttcca gaaaatccac atcttccaat
                                                                      240
ggcctccagg tcttccagac tatccatgtc ttccagaaaa tccttggctt cccttaaatc
                                                                      300
tatagettee aaaaaateeg ggtetteeag gaaateegtg tetteeagea agteeaegte
                                                                      360
ttccaacaaa gccatgtett ccagactate catgtettee agaaaateet tgtetteeet
                                                                      420
caaatccatg tottocagaa aatccacgto ttocagaaaa tatatgtott ccaactaago
                                                                      480
tacgtettee aacaaateca tgtetteeta tateteeagg tetteeagea teteeagge
                                                                      540
ttccagcate tgctcgtctt ccaacatctc cacgtcttcc agcatctctg tgtcttccag
                                                                      600
catcttcatg tettecaaca actacccagt ettecateaa etggeteaat atecatgtet
                                                                      660
tecaaegtet ceagtgtget gatettetga eatteaggte ttecagtgte tgeaatatee
                                                                      720
agggttteeg atggeacetg tgtcaaggte ttccaacaac teegggtett ecagegaett
                                                                      780
caagtettee aataatetea aggtetteea gataateetg agetteeaga aaateeacat
                                                                      840
cttccagaca atccatgtct tccggacaat ccatgtcttc caagaagctc caagtcttcc
                                                                      900
agtaaatcaa gtcttccagc aaatccagtc ttccagcaat tactggtctt ccaccaaatc
                                                                      960
cagatettee aggaaaatee aegtetteea ggaaateeat gtetteeaat aattteaagg
                                                                     1020
tettecatea aatacagate ttecagetaa tecatgtett ecagaaaaat etgtgtette
                                                                     1080
caccaaatcc aagtetteca gtaaatetag ttettecaga aaaatetaga tettecagte
                                                                     1140
aatcagtgtc ttccagaaag aaatccaggt cttccagtca atcagtgtct tccagaaaga
                                                                     1200
aatccaggtc ttccagtcag tcagtgtctt ccagaaaaat ctacgtcttc caccaaatcc
                                                                     1260
aggictica gicaatccac atcitccggg aaaaaatcca ggicticcag ccaatatagg
                                                                     1320
tetteetgaa gateeaegte tteeagaaaa teeatgtett eeagaaaate catgtettee
                                                                     1380
agtaacetee cagtetteca gaaaatecae gtetteecaa caatecaagt etteeggata
                                                                     1440
atttgggtct tcctgaaaat ctacgtcttc caaaaaagcc atgtcttcca gaaaatccac
                                                                     1500
atettecaaa tggeetecag ggtettecag actatecatg gtettecaga aaateettgg
                                                                     1560
tetteceett aaateetata gggtteeaaa aaateegggg tetteeaggg aaateeggtg
                                                                     1620
gtottccago aagtocacgt ottccaacaa agccatgtot tocagactat coatgtotto
                                                                     1680
cagaaaatcc ttgtcttccc tcaaatccat agcttccgaa aaatccaggc tttccaggaa
                                                                     1740
atcogtgtct tccagcaaat ccacgtcttc caacaaagcc atgtcttcca tcaaattaat
                                                                     1800
gtottocago ctacttgtgt ottocaacaa aggtottoca gcatotocag ggottocago
                                                                     1860
atotgotogt ottocaacat otocacgtot tocagcatot otgtgtotto cagcatotto
                                                                     1920
atgtetteca acaactacee agtettecat caactggete aatatecatg tettecaacg
                                                                     1980
tetecagtgg getgatette tgacatteag geettecagt gtetgeaata tecaaggitt
                                                                     2040
ecgatggcac ctgtgtcaag gtcttccaac aactccgggt cttccagcga cttcaagtct
                                                                     2100
tccaataatc tc
                                                                     2112
```

```
<211> 1810
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1774)...(114)
<223> similar to gil006659 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5558
tttttttttt ttaaggaaag gaactttaat gagaaatcaa aacacaggga accaaagtgc
                                                                       60
aaatcatcca cccccatgg gggggccatc ctgaacccca catcatcccc tcagccccct
                                                                      120
teaggeeece agegeaggee cagggeetgg agettetgee teaggtaget ettgagetgg
                                                                      180
ggcaggcctc tctgggactc cagttcctcg aagggtagcg gcaggagctg gtagcccatc
                                                                      240
aggectaggt geogeteest cagggeeste gageccagte aggeaccegg geogtecegg
                                                                      300
cagtaaatgc ccagccgttc ccgcaacacc agcaccaccc tctgggcaag ggtctcgagt
                                                                      360.
agtggcgcta gaggcagcct gggccctgtg ggcaggaccc ttggtgggta tggcaggaag
                                                                      420
gggtcctggg tcctcacggg aagcacagca ccagagctgc tggcgcacag caggaagtct
                                                                      480
gtgcagtage etggaggeae agteaggtee tggeggtatt teteeteeee cageagetgg
                                                                      540
egeaacecet cagetactat gteettgtga etgtaettge agegggeaeg gteggtgatg
                                                                      600
agaggctggg gaaagatggg cacttgctgc cttcgggggaa ggcggggacc ccggtatcct
                                                                      660
gggageteca getecaegge egtgtecage agggagaggt agegaegeae aateaqaqea
                                                                      720
tgaggggtgc cactgatgta gttgatgaag ccaggggaaa aaacaaagtg cagggctctg
                                                                      780
aagggcaggc accgcagttg gcacagtgac atcaagatgt tgactgtagc caggggtgcc
                                                                      840
accectgett ecegageeag gateetetea aggeagggea taaactgetg ttecagggge
                                                                      900
aggtagttca gtcgcccaaa gggcaggacc aacttctgta ccaccttgct gctgagttgc
                                                                      960
gtttcctgaa ccaccaggaa gtgggcaatg gcttccagaa gctggggctc ccgcaaccgg
                                                                     1020
tgccgggcca ggtgctgggc caggagcacc atcacgtggg gagtcagttc ctctggcctt
                                                                     1080
gcctctgcca ggctgctgat cagatgctgc cgtggatacc gcagaaaacg ggggcagctt
                                                                     1140
agagcagett ccaaccettg cccacctegg agaagggget gcaaaggggg aggtggette
                                                                     1200
ggagggagge ggageetteg eteetgttee agggeacaca ceaggggace ateagatgga
                                                                     1260
aagccaagta agactgcaag gtgcagacac acgtggatgg tgtgaatgtc aaaggagggg
                                                                     1320
cagtttegga tgatgagetg acteaagtee tgeagtgtga cetgeteeac aggagggge
                                                                     1380
cgtggccgag accccaagag ctggcccaga cgacgaagcg ccaccgagta gtggtgggcg
                                                                     1440
cgcaccttgc tggggttctg gcccagccag cgcagcagct ccccagggct cttcgcctgt
                                                                     1500
tecagaagee getgeagtee ttgeacagga cetgeactgg ggeeteetee aacaggeegg
                                                                     1560
tecececatt tgetgggeee caaacageag ggetgtaetg gagggateag cageaggeea
                                                                     1620
gacagccgag caggggaggt ctgagcagag agcaggactc gaagcatgga gttgggtgat
                                                                     1680
ggagaccatg actecoeggg coetgegeag gtegeteeet caqteqqtet eqqqeeeqq
                                                                     1740
gggccgggtt ccccccgcgg cctcctcatc ggctagccac cgagtccgcc atcttccccc
                                                                     1800
cacgcgtccg `
                                                                     1810
```

```
<210> 5559
<211> 1193
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (751)...(1100) <223> similar to gil619936 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5559
ccatctttat gtctgtgtgt acctattatt tagctcccac tcataaatga gaacatgcag
                                                                       60
tatttgactt tetgtttgtg agttaatttg ttetgggace aaactgaggt tegggetget
                                                                      120
atttctcacg gcccaataac gagatgcaga tgaactgggg aggaagagag ttatttctgt
                                                                      180
aactggttac agggagaagg totgaacatc atcaccagac caactccaaa ttacaaagtt
                                                                      240
ttccagaget tatatacett ctaagetata tgtctacetg taagtgtgca ttcacctaaa
                                                                      300
gacataagtt actaacttct tttaatctat aactaaggtc tgagtcctga aqaccttcct
                                                                      360
ttggagcctc agtaaattta cttaatctaa atgggtccag gtgctggagt gattaccctt
                                                                      420
atcitigtett etgetaaate aetgaagtit gaggagtiee tittagaeett caataaaett
                                                                      480
gtttgtagag gcctggagag tttcttcaca acccacagta aaacttgttt aatcctgaat
                                                                      540
gggtcctgtt aagaattcct tcattattct gtcatgcttt aaggcccagg gaaagcctag
                                                                      600
gcaaaactct tgataggctt ttgttacatt ccagcctttg tgaaagggca ctggcttttt
                                                                      660
tagettttaa tatttaaett aaccaeteag teagtaetga aacagtegtt atggaggeet
                                                                      720
gcattagtga gacctggcct gccacaatcc tgtgttcatg tattgaaaga ctgtattatt
                                                                      780
aagatggcag tactacccaa agcagtctac agattcactg agagccctat caaaattcca
                                                                      840
acageetttt tgaaaaatgg aaaagettae cateaaacte atatggaatt gtaaaegeeg
                                                                      900.
tgaatageea aaacaatgeg gaaaaggeea aagttggagg aetgacaett eecaatttea
                                                                      960
aaacttacta taaaactaca gtggtctaaa cagtgggctg ttggcacaag tacagatgat
                                                                     1020
actaacatac agatcaatag aatagaattg aggcttcaga aataaaccca tacatctatg
                                                                     1080
gccaactgac tttcaacaaa tgatgctgca ataactgaat gtacacatgc aaaaaaaaag
                                                                     1140
ttgaacctct atgtgatatt gcgatagaaa aaaaacatat ttttgggctt tgg
                                                                     1193
```

```
<210> 5560
<211> 1260
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1254)...(1082)
<223> similar to gi299471 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5560
teettetetg geettgeeet tgeeetgtte eetttetggt eetgeeatgt ttetggeeet
                                                                      60
gecetgteea tgteetggae etgaetetgg ceetggaeet ecetgteeet geeetgeeat
                                                                      120
accttggcce gtteettget etacactgae cetgecetge ettggecetg tgetacceta
                                                                      180
gecetgeeet ggeettetge tgaeeetgat cetgeeatgg ecetggeeet gecatgteee
                                                                      240
tgccctggcc ctggttctgc cctgcttctg gccctggcct tggtcctctc atgtccctgg
                                                                     300
etgtgaccet geceetggtt tttetetgge catgaccetg ecceggttet gtectatece
                                                                     360
tggccctgtc tcagttctgt cctagccctg gcctttcaca gtactttatg cttagtaagg
                                                                      420
gctccatggt gtctgtgagt tgaatgttgt attcatagta tctqccaaaa caqaaaqaaa
                                                                     480
aaaaacaaaa tattttgata agaagttaaa gctttgtata taatatgcct tgaattgtaa
                                                                     540
```

```
gtgcctgtta ttagttgtat tacatatagg tcatggtttt gtacacataa ctccaaacca
                                                                      600
ttgatactgt taaaagaata tatgaatata tgaaagaatg tataaacgta agaatgtatc
                                                                      660
agtatctaat gacctttcca aattaatttt tatttttagc tctgttagat ttttctcagt
                                                                      720
gtaacaaatg tttattccta tgtaattaag ggcgtatttc ctgtacagaa tattcatatt
                                                                      780
acctaattga aaattatatg atacaaaaat ataatactat ttttagccag gcatggtggc
                                                                      840
teatacetgt aateceaaca ttttgagagg ceaegtttgg agaateattt gagteeagga
                                                                      900
gttgaccage etgggcaaca tagtgagace ttgtcettat taaataaata aataaataaa
                                                                      960
taggttgggc actgtggctc atatctgtca tcccagcatt ttgggttgcc caatgcagga
                                                                     1020
ggattgcttg agccccagga gtttgagacc agcctgggca gaatagcaag actccatctc
                                                                     1080
tacaaataat aaaatattaa ccaggtgtgg tggtgtgcac ctgggggtacc agccacctgg
                                                                     1140
gaggetaagg tgggaggttt getegagget geagtgaaet gtgaatgeae caetgeatte
                                                                     1200
cagcctaggc catagaacag gatcttgtct ataaataaag aaataagtaa aaatataaat
                                                                     1260
```

```
<210> 5561
<211> 8514
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (453)...(6673)
<223> similar to gi6002696 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5561
tttcgtcgcg gcgctgcgga cccgggcggc tggcaaagga cgaggcggag gctgaggaag
                                                                       60
gcagcgggga gacccaggct gcagcaacaa agggcagcga gcgattggcc gggctgcagg
                                                                      120
cgagatttgc ctgaagacct ggataatctc catttttgtc atggactgtt aaaacgtttg
                                                                      180
aagttecaat tetggtettg attteccagt taaagatgtt etteaceega atgeagtett
                                                                      240
teetgttggt aaaataagae aaccatcaac attgeetgtt tgtetgettt tgaatetett
                                                                      300
aaggatggat gtttgtåaga tgttgcttaa tacagtctgg aatactctgt ccatttgttg
                                                                      360
aattgtaaat gactttcaaa tgtgcaagtt ctgttaaata caaagagaac ctctatgggt
                                                                      420
aacttttgtg ttgaagaagt catttgtcaa ccatggtaaa acttgcaaac ccactttata
                                                                      480
cagagtggat tettgaaget atacagaaaa taaaaaagea aaageaaagg ceetetgaag
                                                                      540
agagaatetg ceatgeggte agtaetteee atgggttgga taagaagaea gtetetgaae
                                                                      600
agetggaact cagtgttcag gatggetcag ttetcaaagt caecaacaaa ggeettgeet
                                                                      660
cctataagga cccagacaac cctgggcgct tttcatcagt taaaccaggc acttttccta
                                                                      720
agtcagccaa ggggtctaga ggatcatgta atgatctccg caatgtqqat tqqaataaac
                                                                      780
ttttaaggag agcaattgaa ggacttgagg agccgaatgg ctcctccctg aagaacatag
                                                                      840
agaagtatet cagaagteaa agtgatetea caageaceae caacaaceca geettteage
                                                                      900
ageggetgeg actgggggee aaacgegetg tgaataatgg gaggttactg aaagacggac
                                                                      960
cgcagtacag ggtcaattat gggagcttag atggcaaagg ggcacctcag tatcccagtg
                                                                     1020
catteccate etegetecca cetgteagee ttetacecca tgagaaagae cageeeegtg
                                                                     1080
ctgatcccat tccaatatgt agcttctgtt tggggactaa agaatcaaat cgtgaaaaga
                                                                     1140
aaccagaaga actoctotot tgtgcagatt gtggcagtag tggacaccca tcctgtttga
                                                                     1200
aattttgtcc tgaattaaca acaaatgtaa aggccttaag gtggcagtgc atcgaatgca
                                                                     1260
agacatgcag tgcctgtaga gtccaaggca gaaatgctga taatatqctt ttttqtqatt
                                                                     1320
cctgtgatag aggatttcat atggaatgct gtgacccacc actttccaga atgccaaaag
                                                                     1380
ggatgtggat ttgccaagtc tgcagaccaa agaaaaaggg aagaaaacta cttcatgaga
                                                                     1440
aagctgcaca aataaaacga cgatatgcaa aacccattgg acgaccgaaa aataaattaa
                                                                     1500
```

```
agcaacgatt gttgtctgta accagtgatg aaggatccat gaatgcattc acaggaaggg
                                                                    1560
ggtcacctgg taggggtcaa aagactaaag tctgtaccac accttcatct ggtcatgctg
                                                                    1620
catctgggaa ggactcaagc agcagattgg ctgttacaga ccccactcgg cctggtgcca
                                                                    1680
ccaccaaaat caccaccacc tccacctaca tttctgcctc tacacttaaa gttaacaaga
                                                                    1740
aaaccaaagg gctcattgat ggccttacta agttttttac accatcacct gatggtcgca
                                                                    1800
gatcacgagg tgaaattata gacttttcaa agcactatcg tccaaggaaa aaggtctctc
                                                                    1860
agaaacagtc atgcacttct catgtgttgg ctacaggtac cacacaaaag ctaaaacctc
                                                                    1920
cacettette aettecacee ecaaceeeca teteeggtea gageeceagt teacaaaagt
                                                                    1980
ccagcacggc cacttettet eceteteece agagttette cagecagtge agtgtgeeet
                                                                    2040
ccctgagcag ccttaccact aacagccagc tgaaggcact ctttgatggg ctttctcata
                                                                    2100
ctataccact cagggacagt ctcgcaaaaa gggacacccc gagttatgca ccacccaaac
                                                                    2160
gtatgcgtcg taaaactgaa ttatcttcca cggcaaaatc taaagcccac ttctttggca
                                                                    2220
aaagagatat tagaagtegg tttatttete aeteeteete etetagetgg gggatggeta
                                                                    2280
gaggaagtat ttttaaagca attgctcact tcaagcgaac aactttcctt aaaaagcaca
                                                                    2340
ggatgctagg cagattaaaa tataaagtga cccctcagat ggggaccccc tcaccaggga
                                                                    2400
aggggagett gacagaegga aggattaaae etgateagga tgatgataet gaaataaaaa
                                                                    2460
taaacatcaa acaagaaagt gcagatgtaa atgtgattgg aaacaaggat gtcgttactg
                                                                    2520
aagaggattt ggatgttttt aagcaggccc aggaactttc ttgggagaaa atagagtgtg
                                                                    2580
agagtggggt ggaagactgt ggccggtacc cttctgtgat tgaatttggt aaatatgaaa
                                                                    2640
tecaaacetg gtacteeteg eettaceeae aggaatatge aagattacea aagetttace
                                                                    2700
tgtgtgaatt ctgtcttaaa tatatgaaaa gtaaaaatat tttgctaaga cactccaaga
                                                                    2760
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<223> similar to gi31397 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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gateegeteg atgtggtetg caeagaggtg tgeeteteae aetteeaete teeteggeeg
                                                                     7020
ttgcctgtgc agatgcactg gagcaggttt cctcgattat ccttcttgct ccaggtgtct
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                                                                     7200
                                                                     7260
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gctatgggct tgcaggtcca ttctcctttt ccattaccaa gacacacaca ctctaacatg
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                                                                     7380
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                                                                     7440
cagteceaga teatggagte tttaggaege teataagtgt cacecacteg gtaagtgtte
                                                                     7500
ccagtgtact tgtcaaagca agtctcttca gcttcaggtt tactctcgca gttaaaacct
                                                                     7560
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gagggcaccg ctgtccccag gcacaggacg gccagcagca gcagcccggg ccccggaccc
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ctaagcatgt tgagacggtg ggggagagac gcccgcaccg ggaggcaagt tgccaccaag
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                                                                     7920
                                                                     7980
ctccaagaag gtgggggcca gagggtgggg aaggggacgg gtggagggac agaagggatg
                                                                     8040
cagaggacca gagaagttgt ggctgcaggt cccctcttcc cgctcgcgcc tggqgttccc
tctcctcccc ctgtgcagca cagccg
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```

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<210> 5563
<211> 4827
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (496)...(3592)

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                                                                      120
agtotgaaat atottggoot tgaatagoat gaaattooot tattatotgg aataaaaaaa
                                                                      180
aaccctaagc tataagtagt gaaagtctta ggaaaatatt tttgaagcat ttaaaaaaaa
                                                                      240
attetgaata tgttgtgtaa gaagaacatt gtaattgaat atetggcaga cattetatat
                                                                      300
gagtatettt atgggttttg tttttcaqqc attaaaaaat atttaatcat tcatqtqttq
                                                                      360
agactcattc ttgagttatg gatgacaagg cttctgttgg aaaaatcagt gtctcttcag
                                                                      420
actcagtatc tactcttaat agtgaagatt ttgtcttggt ttccaggcaa ggagatgaga
                                                                      480
caccatctac aaataatgga agtgatgatg agaaaacagg actcaagatt gtagggaatg
                                                                      540
gaagtgaaca gcagctgcaa aaagagctag cagatgtact gatggatcct ccaatggacg
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accagecagg ggaaaaggag cttgtgaaaa ggtcacaact ggatggtgaa ggagatgggc
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ctetttetaa teagetetee getteateea ceattaacee tgtgecatta gtagggetee
                                                                      720
aaaaaccaga gatgagccta ccagtgaaac ctggacaagg agattctgaa gcttcaagtc
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ctttcacacc agtggccgat gaggacagcg tagttttcag taaactgact tacttaggct
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gtgcctcggt aaatgctccc aggagtgaag tggaagcctt aaggatgatg tccatcttaa
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gaagccagtg tcagatttca ctagatgtta ccctttcagt gccgaatgtg tctgaaggaa
                                                                      960
ttgtgagact cttagatcct cagacaaaca ctgaaatagc aaactaccct atctacaaaa
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tectettetg tgtcagaggg catgatggaa ctcetgagag tgactgtttt getttcaetq
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                                                                     1200
cactttcage cactgetgea ecceagacte etgacagtga catetttace ttetetgtgt
                                                                     1260
ctttagaaat aaaagaagat gatggtaaag gttattttag tgcagttccc aaagataagg
                                                                     1320
acagacagtg ctttaaacta cgccaaggaa ttgataagaa gattgtcatc tatgtgcagc
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aaacaactaa taaagaactt gccattgaaa ggtgttttgg tcttctcctt agtccaggaa
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gaccgaagca gttgtcatcc ttagtaagaa acggtgttcc tqaaqctctt cqaqqaqaaq
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                                                                     2880
tcgagcgatt tgagcgggag aataggcgtc tacaagaagc taacatgagg ttqqaacaqq
                                                                     2940
aaaacgatga cttagcccat gagctggtga ccagcaagat tgcactacgg aaggacctgg
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                                                                   3180
gtgactataa gcagatttgt tctcagttga gtgaaagatt ggagaagcag cagacagcca
                                                                   3240
ataaggtgga aattgagaaa attcggcaaa aagtggatga ctgtgagcgg tgccgggaat
                                                                   3300
ttttcaacaa agaagggcgt gtaaaaggca taagctcaac caaggaggtt ttagatgagg
                                                                   3360
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cacagaccaa acteccaget ggtggaggee gagtgtaaga tacaggaett tggaacacce
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                                                                   3540
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acactgaget ccataaagac agcaaccggg gttcaaggga aagagacttg ctgagagcag
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gtgtgattct gtgacttgtc ccaggaccag aatgtaccta agtcagatcc atagacgcat
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gttggtaggt cactggacca gagcttgtga agcaggcaac ctctggggta agactactga
                                                                   3780
tactaacagg cetgetaget cageegaege tetggaeact etagaaatea etecteagtg
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tgacctccca ggcctcttcc ccgtgtacgt caacacctca cccagcctaa aaggctgaag
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ettcaatgee ágeagaaggt eeceeaggta gacatggaga ageaetttgt tttaaatagg
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gcctgggtac aaacctcact gttcagatgg gctgtaagtt ctcacttcaa agctatggaa
                                                                   4800
tggattttag cacctttaaa aaaaaaa
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<210> 5564
<211> 2338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2339)
<223> n = a,t,c or g

<220>
<221> misc_feature.
<222> (627)...(2012)
<23> similar to gi4151084 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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                                                                      120
egegeeegge ategataate tgaateteta aegageteee gggegaegtt gatgeagetg
                                                                      180
gtaccgggac cactettega aaatcategg tttagaggtt ttaattetga atccattgeg
                                                                      240
aaaactgttg ggcggacaga gcactactaa ctcctaactt ttctcagaaa gctgggctct
                                                                      300
getttegeca geaacceggt eegaagtege gggeatatte tgtetgaaat egtgtgeace
                                                                      360
gaaateeeeg cettgeggtg gaggetggeg ctaggeggee teageetegg cetgetgege
                                                                      420
teaggaacce gegeeegge teeteggega tecattgete titteetetgg egeeggeege
                                                                      480
aggeeteggt caegeeeeca geggeeegtt ggttteeggg teeegegggg tgeeeeegee
                                                                      540
cacacgetat geettaaatt gggecagget gaggegetge tgetggageg geegateega
                                                                      600
gacgtggctc cctgggcggc agaaccatgt tggacttcgc gatcttcgcc gttaccttct
                                                                      660
tgctggcgtt ggtgggagcc gtgctctacc tctatccggc ttccagacaa gctgcaggaa
                                                                      720
ttccagggat tactccaact gaagaaaaag atggtaatct tccagatatt gtgaatagtg
                                                                      780
gaagtttgca tgagttcctg gttaatttgc atgagagata tgggcctgtg gtctccttct
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ggtttggcag gcgcctcgtg gttagtttgg gcactgttga tgtactgaag cagcatatca
                                                                      900
atcocaataa gacattggac cottttgaaa coatgotgaa gtoattatta aggtatcaat
                                                                      960
ctggtggtgg cagtgtgagt gaaaaccaca tgaggaaaaa attgtatgaa aatggtgtga
                                                                     1020
ctgattetet gaagagtaac tttgccctcc tectaaaget tecagaagaa ttattagata
                                                                     1080
aatggetete etacecagag acceageace gtgeceetea gecageatat gettgqtttt
                                                                     1140
gctatgaagt ctgttacaca gatggtaatg ggtagtacat ttgaagatga tcaggaagtc
                                                                     1200
attegettee agaagaatea tggeacagtt tggtetgaga ttggaaaaqg etttetagat
                                                                     1260
gggtcacttg ataaaaacat gactcggaaa aaacaatatg aagatgccct catgcaactg
                                                                     1320
gagtotgttt taaggaacat cataaaagaa cgaaaaggaa ggaacttcag tcaacatatt
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ttcattgact cettagtaca agggaacett aatgaccaac agatectaga agacagtatg
                                                                     1440
atattttctc tggccagttg cataataact gcaaaattgt gtacctgggc aatctgtttt
                                                                     1500
ttaaccacct ctgaagaagt tcaaaaaaaa ttatatgaag agataaacca agtttttgga
                                                                     1560
aatggtootg ttactocaga gaaaattgag cagotcagat attgtcagca tqtqctttqt
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gaaactgttc gaactgccaa actgactcca gtttctgccc agcttcaaga tattqaaqqa
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gaattagtaa tgaaaacttt ttcctcactt ggattctcaq gcacacaqqa qtqtccaqaq
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                                                                     1920
ctactttctg tggagggaca ggttattgaa acaaagtatg aactggtaac atcatcaagg
                                                                     1980
gaagaagctt ggatcactgt ctcaaagaga tattaaaatt ttatacattt aaaatcattg
                                                                     2040
ttaaattgat tgaggaaaac aaccatttaa aaaaaatcta tgttgaatcc ttttataaac
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cagtatcact ttgtaatata aacacctatt tgtacttaat tttgtaaatt tggattttta
                                                                     2160
tatatcatat tttcttaatt cattgtacac atttgactta ctgcacagta tattgatcat
                                                                     2220
tttaatggga aactttagct ttctactttt tatttttgtt ttttcacttt ctatqccatt
                                                                     2280
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                                                                     2338
```

```
<210> 5565
<211> 8734
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (91)...(6623)
<223> similar to gi4530437 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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aacgatgtga gtatgcagtg ctcacaggat atacttcgaa tgctcctctc tcttcagcca
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gttcttcagg atgccattca gaaaaaaaga acagtaagac cttggggtgt tcagggtcct
                                                                     4020
ctcacttggc aacaatttca taaaatggct ggccgaggct cttatggaac tgatgaatcc
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ccagaaccac tgccaatccc cacatttttg ttgggttatg attatgatta tctggtgctt
                                                                     4140
tetecatttg etetteetta ttgggagaga ettatgetgg aaccetatgg ateteaaaga
                                                                     4200
gatatagcct atgttgtact gtgtccagaa aatgaagcct tgttaaatgg agcaaaaagc
                                                                     4260
ttttttagag atcttactgc aatatatgag tcctgtcgat taggtcaaca tagacctgtt
                                                                     4320
tetegaetgt taacagatgg gateatgaga gttggateta etgeateaaa gaaaetatea
                                                                     4380
gaaaagttgg tagcagaatg gttttctcag gcagctgatg gtaacaatga agcattttct
                                                                     4440
aaactcaagc tttatgcaca agtctgcaga tatgacctag gtccttatct tgcttccctg
                                                                     4500
ccattggaca getetetact tteccageca aatttagttg cccetacaag teagtetttg
                                                                     4560
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                                                                     4620
tetgeagega geageactat gaeagtgaet teaggtgttg ceatatetae tteagttgee
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acagetaatt caactitgae cacagetica acticatett cateateete caactigaat
                                                                     4740
agtggagtat catcaaataa actaccttcg tttccaccct ttggcagtat gaacagtaat
                                                                     4800
gctgcaggat ccatgtctac acaagcaaat acagttcaga gtggtcagct aggagggcaa
                                                                     4860
cagacatcag ctctacagac agctgggatt tctggagaat catcttcact tcccactcag
                                                                     4920
cegeateetg atgigteiga aageaegatg gategggata aagigggaat ceeeacagat
                                                                     4980
                                                                     5040
ggtgatteae atgeagteae gtateeaeet geaattgttg tttatataat tgateetttt
acatacgaaa atacagacga gagcactaac tettetagtg tgtggacatt ggggctactt
                                                                     5100
cgatgettte tagaaatggt ccagaetett ceteeteata teaaqagtae tgtttetgta
                                                                     5160
cagattattc cttgtcagta cctgttgcaa cctgtgaagc atgaagatag agaaatctat
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ecceageatt taaaateest ggettttteg geetttaeee agtgteggag geeactteea
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acatcaacca atgtgaaaac attgactggc tttggtccag gtttagccat ggaaactgcc
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cttagaagtc ctgatagacc agagtgtatt cgactttatg cacctccttt tattctggct
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ccagtgaagg acaaacagac agagctagga gaaacatttg gagaagctgg acagaaatat
                                                                     5460
aatgttcttt ttgtgggata ctgtttatca catgatcaaa ggtggattct tgcatcttgc
                                                                     5520
acagatetat atggagaaet tttagaaaet tgtateatta acategatgt tecaaatagg
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gctcgtcgga aaaaaagttc tgctagaaaa tttggtctac agaaactttg ggagtggtgc
                                                                     5640
ttaggacttg tacaaatgag ttcattgcca tggagagttg taattggtcg tctaggaagg
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ctaagtaaaa ggctcaaaga catgtgtaga atgtgtggta tatctgctgc agactcccct
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gattetgtgt caactggtte tgtatttgga agaagcacga ctctaaatat qcaqacatct
                                                                     5940
cagctaaata ccccacagga tacatcatgt actcatatac ttgtgtttcc tacttctgct
                                                                     6000
tetgtgcaag tagetteage taettatace actgaaaatt tggatttage tttcaateee
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aacaatgatg gagcagatgg aatgggtatc tttgatttgt tagacacagg agatgatctt
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gaccotgata toattaatat cottootgot totocaactg gttotoctgt acattotoca
                                                                     6180
ggateteatt acceecatgg aggtgatgeg ggeaagggte agagtaetga teggetaeta
                                                                     6240
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tttgtatcaa ctgccaaagc aggtccatta cctgactggt tctggtcagc atgtcctcaa
                                                                     6360
geacaatate agtgteeeet ttttettaag geetetttge aceteeaegt geetteagtg
                                                                     6420
caatctgacg agctgcttca cagtaaacac tcccacccac ttgactcaaa tcagacttca
                                                                     6480
gatgtcctca ggtttgtttt ggaacagtac aatgcactct cctggctaac ctgtgaccct
                                                                     6540
gcaacccagg acagacgete atgtetecca atteattttg tggtgetgaa teagttatat
                                                                     6600
aactttatta tgaatatgct gtgatcttca tttgatggaa ctgtgcaaga aaaqaacaag
                                                                     6660
gaaaaatgga tgtttcgctg caggattaag ttacaattat cttctcagtg aaggtcattt
                                                                     6720
gtgatggggt ctaattctta ttacttcaac aaatattgtt ttgacttggg gggaggggct
                                                                     6780
```

```
ataaccetge tattttteat tgactetatt gaactettta ggatgatgae tgateataca
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aaacgtatta taacattttc gtagcaaaat taaccttttt tttttccagc cacagtattt
                                                                     6900
gtgaaaagta atgagccata gtacccagtc atgttaaatg aatattaaaa gcatggagag
                                                                     6960
qaaacatqaq qaacaatgaa tttcaacata tggcttcaaa acatgaaaat gttcttgtat
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ggattatagt atctagtatt caaaaatgcc tgcatctctt ctcttattta ttgtaagttt
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ttaaatgtat aaattgtott atatttotta acctotttta taaaaatttt cotagaaggt
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ttatactgcc ttcttgcttt aaagcctatt ggtctaaaat atatgtaatc gtcttaatta
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aaaagttgca gtagggtcgc ttttagagta ttatttttt gtaagggggt gggtgggaca
                                                                     7260
gtaaatttgt attgtctcga tgtacagttt aacgggggata gagggggaat aatgtccata
                                                                     7320
ccattgtgtg tggaggattt acagctaagc tgtagttgca gagtacatgt acagtaatga
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agticactgt gtttataaat tgaaaaggta ccaggtctta cagcatttta tatatcacat
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ctttacagaa taacatgatg gcaatataca agtggtattg ttaggtggtt taacttagaa
                                                                     7500
taaaatgaga attetteagt tatattttgt actatggttt agggetatga etaatattte
                                                                     7560
aggecattte eggtgaaaga aacttagttt tacaagaaaa accatttget actgaatget
                                                                     7620
taaactaatt ttagtgttta ätgttacatg cttaaatttt tttcagtttt aacagtggca
                                                                     7680
tatttaggca tggaaatatt attatgaaat ttattttcag gätctgctat aaggttgaaa
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tatttaattt tettggtttg gagatgteag teecaaacac cagagtetgt actittetat
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aacacagete agattaaggt agggeatatg ceaaggaggt teteacetee etaaagaagg
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gactigaatt ttagggactt taattcaccc ctccttcaat acaactttcc cccttcttqt.
                                                                     8160
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cagtgetget cacaaaagag eccaagtteg cetectacet geattgetga ettgaattea
                                                                     8280
cagtogooga gtotacotag otttottgga agoagtotag coaaaattto tatttggtac
                                                                     8340
cgttcaccta attatctaca agaacaaaat ccagttgtat ttaccaaaaa ctctacttcc
                                                                     8400
aggigtitgt titagittit tittitact gaaactigit titiggigaat accictgige
                                                                     8460
cttagaatta aatateaett teettatgaa eaacataace tteetteaga ttgtgtatat
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gaaaacatta gcaagtettg ttttttetat gaagcaaaca caattqqtqa caaaqqttqt
                                                                     8580
caatcatttc ttcaaaatta taatgcagtt ctaatggtca gcatattttg atattaaatt
                                                                     8640
taaagatcac ctctctgcat ttgtttttaa attatgctaa tacaccacac attatgttgg
                                                                     8700
tatgttttgt totgtacttt otttaaaaaa aaaa
                                                                     8734
```

```
<210> 5566
<211> 4871
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (151)...(3045)
<223> similar to gi897827 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5566

tttcgtgctg ctctcgcgat atttgcgcga gcctgcttcc ttctttcctc ccttgccagt ctgcctgtct tcctccccgt cttccctgcc cggcctcccc cttcttcccc cgctggccc ccccggag ggataatatg gtctccggcg atggacgccc caaaagcagg atacgccttt gagtacctta ttgaaacatt aaatgacagt tcacataaga agttcttcga tgtatctaaa 240
```

```
ettggcacca agtatgatgt tetgeettae teaataeggg tettgttgga agetgetgta
                                                                      300
cgaaattgtg atggcttttt aatgaagaag gaagatgtta tgaacatttt agactggaaa
                                                                      360
accaaacaaa gcaatgttga agtgcccttt ttccctgccc gtgttcttct tcaaqatttt
                                                                      420
actggaatac cagcaatggt ggattttgct gctatgaggg aggcagtgaa aactcttgga
                                                                      480
ggtgatcctg agaaagtcca tcctgcttgt ccgacagatc ttacagttga ccattcttta
                                                                      540
caaattgact tcagtaaatg tgcaatacag aatgcaccaa atcctggagg tggtgacctg
                                                                      600
cagaaagcag gaaagctctc tccacttaaa gtgcagccta agaagcttcc ctgcagaggc
                                                                      660
cagactacct gccgaggatc ttgtgattct ggagaactag gccgaaactc aggaacattt
                                                                      720
tettegeaga ttgagaatae acceatectg tgteetttte atttgeaace agtgeetgaa
                                                                      780
cctgaaacag tgttaaaaaa tcaagaagta gaattcggca gaaatcgaga gaggcttcag
                                                                      840
tttttttaagt ggagttcaag agtttttaag aatgtggcag ggatccctcc tggaactqqa
                                                                      900
atggctcatc aaataaactt agaatatttg tcaagagtgg tttttgaaga aaaagacctc
                                                                      960
ctcttcccag acagtgtagt cggcacagat tcacacataa cgatggtgaa tggtttaggg
                                                                     1020
attotggggt ggggggttgg aggcattgaa acagaagcag ttatgcttgg totgccagtt
                                                                     1080
tctcttactt taccagaggt ggttggatgt gagttaactg ggtcatcaaa cccttttgtt
                                                                     1140
acatccatag atgttgttct tggtattaca aagcacctca ggcaagtagg agtggctgga
                                                                     1200
aagtttgttg agttttttgg aagtggagtt tcacaattat ctatagttga tcgaactaca
                                                                     1260
atagcaaaca tgtgtccgga atatggtgct atcctcagct ttttccctgt tgacaatgtg
                                                                     1320
acattaaaac atttagaaca tacaggtttt agcaaagcca aactcgaatc aatggaaaca
                                                                     1380
taccttaaag ctgtgaaatt gtttcgaaat gaccagaatt cttcaggaga acctgaatac
                                                                     1440
toccaggiga tocagattaa toigaattoa atagitocat oigitagigg tocaaaaaga
                                                                     1500
cctcaggata gagttgctgt gacagatatg aaaagcgatt tccaggcttg cttaaatgaa
                                                                     1560
aaggttggat ttaaaggctt ccaaattgca gctgaaaaac aaaaggatat tgtctccatt
                                                                     1620
cattatgaag gaagtgaata taagctgtct catggatcag tggtcattgc tgcagttatc
                                                                     1680
agttgtacca ataattgcaa tccatctgtc atgcttgctg caggtctttt ggctaaaaag
                                                                     1740
gctgttgaag ctggtctgcg tgttaaacct tatataagaa caagtttatc tccaggcagt
                                                                     1800
gggatggtta cacattacct cagttcaagt ggagtattac catatctaag taagcttgga
                                                                     1860
tttgaaatcg ttggctatgg atgttcaact tgagtgggaa atacagcacc cttatcagac
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gcagttttaa atgcagtaaa acagggtgat ttggttacct gtggaatttt atctggaaac
                                                                     1980
aaaaattttg aaggtegtet ttgtgattgt gttegtgeea attatettge etetecaeee
                                                                     2040
ttagtggtag cttatgccat agcaggcaca gtgaatatag attgccagac agaaccttta
                                                                     2100
ggtactgacc ccaccggcaa gaacatttac ctgcatgata tttggcctag tcgagaagaa
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gttcatcgag tagaggaaga acatgttata ctatccatgt ttaaagcatt aaaagataaa
                                                                     2220
atagaaatgg ggaataaacg gtggaattcc ttagaagcac cggattcagt tttgtttcca
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tgggacttaa agtctactta tatcagatgc ccttcatttt ttgataaact taccaaagag
                                                                     2340
ccaattgcac tccaggccta ttgaaaatgc ccatgtctta ttatatttgg gagactctgt
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cacaaccaga tcatatatca cctgccagaa agtatcgcta ggaatagtgc tgccgctaag
                                                                     2460
tatttgacaa acagaggeet taccectegt gaattcaact ettacggage tegaagaggt
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aatgatgctg taatgacaag aggcactttt gcaaatatca agctttttaa taagtttatt
                                                                     2580
ggaaaaccag ctcctaaaac aattcatttt ccatcaggac agacgctaga tgtatttgag
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gctgcagagc tgtaccagaa agaaggtatc ccactgatta ttttagcagg aaagaaatat
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ggttcaggaa actccagaga ctgggctgcc aaaggaccgt atttactggg tgtgaaagct
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gttttggccg aaagttatga aaaaatacac aaagatcatt tgattggaat tggcatagct
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ccacttcagt teettecagg agaaaatgca gatteettgg geeteteegg tagagaaaca
                                                                     2880
ttttctttaa catttcctga agaactgtct cctggaatta cattgaatat acagacaagc
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                                                                     3000
aaacatggag gattattaaa ctttgtggca cgaaaattct catagtatct acttaccata
                                                                     3060
gatacctttc ataactggta actgcaaagc cttttgtgct ggacccagga atccttacca
                                                                     3120
tggagcagca gatagtccca gtatactcac ttatctcatc catggatgta aatgatgatg
                                                                     3180
aatcaacata gtaactgaaa tgaaatcttc ttgattttaa ataatatacg aatggtgcta
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ttaatattgc taaaatcaac gtgtgaagtg tgttgtggaa gagacctgta agtatggggg
                                                                     3300
ggggcgatat tttatcagac cattttgtaa ataaaggcag aatttgtgtt gaagattctt
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atatgaataa ccttcctgga tttgtttagt tttgcaccaa taaaactgtg tactactgtt
                                                                     3420
tgttggttta agagtagcag attgaaatat aagaagccag attagactct aaaattgtgg
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ccattgggaa tctcatttat aaatggacct tttaagtata ttaattcctc ttcagaattg
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agctgggaca catttgggca ttcttagttt gtcatataac caggtttatc cttagtctaa
                                                                     3600
ctgcaaggga tagaacctgc cccaggtcac caatccattc tggtccaatc ccagcccaag
                                                                     3660
```

```
gttcccttcc cacatatgaa gatggaccat ggcaggatac aactgattgt gtggcaccat
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gtattagcag tgggaatatg tatcacatat gatgcagcct ttcatatitc agcagtttgc
                                                                 3780
cactgtgact gtctggcaag cccccagatg gcgttatatt aattggatta gattattttg
                                                                 3840
ctcaccttat gtaatactgt aacttcctat aacctaatat tttcggtatc attaaccaaa
                                                                 3900
atttcacact catagttgct aaagagaatg ttattcaatc attaaactct gaactgattt
                                                                 3960
cttctataca tttaaattat ccacctcaa taatacgggt gctcaaccct atgcattttt
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taagtgttgc tatttcttaa ttaaattgat ttcctgtcat tttgaatcat ttatcacctg
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cgatgcatga ttctattaat tttgttatgt tactgtttta accaaagctg accgtaagga
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taaaacactt aagttgttgc tgagtactat atatcctcaa tatgcatgtc tgcccatcac
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attgtagtga tttttttca catagatatc tttctatgac ctagttagtt actgcaattc
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agaattagtt cacattgcat aaagaattac ttgttgtaag caaaatgctg aaactaccaa
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accagtggat gaagaccact aagaactttg cacataatca tacaatcttt tgaaaatatt
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ttgcaaatat gtgtttagac aataagatgg actagagttc gacaaaatga tttctttatt
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taaattttgt ataagtattt tettegacae ttteaaatta tattgtgtte ttgatatatg
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ctgtatattt atttgttagt gcatgtgttt ttaatttaca tgaaaacatg agttaggaga
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aattacaggt tgaaagatga aatgcctgta tgtgctctga agaaatggta attccagatt
                                                                 4740
4800
gtggctgggc tggagtgcaa tggcgcgatc ttggctcact ggcacctccg cctcccggga
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tcagggtatt c
                                                                 4871
```

```
<210> 5567
<211> 2950
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2951)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (17)...(2780)
<223> similar to gi33989 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
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                                                                      120
caagagcagc gagaagcgac aggctgtgga caccgctgtc gatggcgtgt tcatccggag
                                                                      180
tttgaaagtc aactgcaaag tcacctctcg cttcgcccac tatgttgtca ccagccaagt
                                                                      240
ggtcaacact gccaatgaag ccagggaagt ggccttcgac ctggaaatcc ccaagacagc
                                                                      300
attcatcagt gactttgccg ttacagcaga tggaaacgca tttatcggag acataaagga
                                                                      360
caaggtgact gcatggaagc agtaccggaa agcagctatc tcaggagaga atgccggcct
                                                                      420
tgtcagggcc tcggggagaa ctatggagca attcaccatc cacctcaccg tcaatcccca
                                                                      480
gagcaaggtc acgtttcagc tgacttatga ggaagtgctg aagagaaacc atatgcagta
                                                                      540
tgaaattgtc atcaaagtca agcccaagca gctggtgcat cattttgaga ttgatgtgga
                                                                      600
catcttcgag ccccagggga tcagcaagct ggatgcccag gcctctttcc tgccgaagga
                                                                      660
```

```
actggcagcc caaactatca agaagtcctt ctcaggaaaa aagggtcatg tgctgttccg
                                                                      720
teccacegtg agecageage agteetgeee cacatgetet acateettae tgaaegggea
                                                                      780
cttcaaggtg acctacgatg tcagtcgaga caagatctgc gacctcctgg tggccaataa
                                                                      840
                                                                      900
ccactttgcc cacttctttg ccccccaaaa cctgacaaac atgaacaaga acgtggtttt
tgtgattgac atcagtggct ccatgagagg ccagaaagtg aagcagacca aggaggcact
                                                                      960
ccttaaaatt ctgggggaca tgcagccagg ggactacttt gacctggttc tttttgggac
                                                                     1020
tegagtacaa tegtggaagg getegetggt geaageatet gaggeeaace tacaageage
                                                                     1080
tcaagacttt gtgcggggct tttccctgga tgaggccaca aacctgaatg gaggtttgct
                                                                     1140
                                                                     1200
ccggggaatt gagatettga accaagttea ggaaageete ccagaactea geaaccatge
ctcaatactc atcatgttga cagatggcga tcccacagag ggggtgacgg accgttccca
                                                                     1260
aatcctcaag aacgtccgca acgccatccg gggcaggttc ccgctctaca acctgggttt
                                                                     1320
cggccacaat gtggacttta actttctgga ggtcatgtcc atggagaaca acggacgggc
                                                                     1380
ccagagaatc tacgaggacc atgatgccac ccagcagctg cagggtttct acagccaggt
                                                                     1440
agccaaaccc ctgctggtgg atgtggattt gcagtacccc caggatgctg tcttggccct
                                                                     1500
gacccagaac caccataaac agtactacga aggctcagag attgtggtgg ccgggcgcat
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tgctgacaac aaacagagca gcttcaaggc tgatgtgcag gcccatgggg agggacaaga
                                                                     1620
                                                                     1680
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ccacatgctg gagaaccacg tegagegeet etgggeetac etcaccatec aggagetget
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gatgtcgctg gactatgggt ttgtgacccc actgacctcc atgagcatca ggggcatggc
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gatgctggga cccagaagga cgttcgtgct gtcagccttg cagccttctc ctactcattc
                                                                     1980
cagetecaat acceagegge tgccagaceg agtgacegge gtggacacag acceteaett
                                                                     2040
catcatccac gtgccccaga aagaggacac cctgtgcttc aacatcaatg aggagcctgg
                                                                     2100
tgttatcctg agcctggtac aggaccccaa cacaggcttc tcagtgaatg gacagctcat
                                                                     2160
tggcaacaag gccaggagcc ctgggcagca tgacggcacg tacttcgggc ggctgggaat
                                                                   -, 2220
cgcaaaccct gccacggact ttcagttgga agtgactcct cagaacatta cgctgaaccc
                                                                     2280
cggctttggt gggcctgtgt tttcctggag ggaccaagct gtgctgcggc aggacggggt
                                                                     2340
ggtggtgacc atcaacaaga agaggaacct ggtggtgtct gtggacgacg gtggcacctt
                                                                     2400
ttgaggttgt ttttgcaccg agtgtgggaa ggggagctcg ggtcnaccag gacttcctgg
                                                                     2460
ggettetaat gtgetgggae aagteaateg ggatgteaag eeegggaege aagggetget
                                                                     2520
gggggcaaat ttttccaacc ccaacgggtt ttgaaatgtc tgaaaatcca cccccaggct
                                                                     2580
ccgaccccca aaaagcccaa atgcccacga tggtggtgag gaacccgccc ggcctcacgg
                                                                     2640
tcacccaggg gtttgcaaaa agactacagc aaggacccgt ggcatggggc cgaqqtqtcc
                                                                     2700
tgctggttca tttcacaaca atggggcttg aattcaccga ttgtgcctac actgattata
                                                                     2760
ttegteeeeg acatettetg agecetetgg gecageaacg cetgtteent geeeeegggg
                                                                     2820
gccaaggcag aggaggagga cgacateetg acetgetget gaggetgtae eteettgace
                                                                     2880
taagetggtt cetttgtgte aaageacete atgeetteee attaaagaga ggeegtgtee
                                                                     2940
aaaaaaaaa
                                                                     2950
```

```
<210> 5568
<211> 1673
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1582)...(144)

<223> similar to gi5777952 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5568
                                                                       60
ttttttttt ttgageggtt ttettaagtg tetttaatae teeacteagg geagteeect
ccctctactg agaggetett ggetetggee ccaagageag etggaaggee etggeetgaa
                                                                      120
cticaaccaa ctigaatgic caaggotgig tgigocacgo tocciggoto tggtacgigg
                                                                      180
tatgcaagca ceteteggge ettgggggag tttgatecee tecagecact cetgggtaca
                                                                      240
geeteetgea egtgtgeace tggaeteegg aegeegeaca gggatgteta agtgtaaatg
                                                                      300
ccttccattc tgcccgcagc aggggcctta tccgcatgtc cgtctgggag tctggggctt
                                                                      360
                                                                      420
ggcctcttgc cattttaagc atcctccaag cacaagggga ggacccttcc acaaagtggg
                                                                      480
aatgggggaa ctttgccctt ctttaaaggt ttcaaggatc aagtttctgg gatgtttcga
aaggcatagg gttccaagac aaaggtttac acccatcttt teggttette ttcaagggtg
                                                                      540
accttetgtg gaaatetttg gtttetaagg gtteggtaag gtgaeteete cacateeete
                                                                      600
cgttgaacag ctccttgggc cgcatgtctg aagatgtgtg ccaggtgccc gtctgagctg
                                                                      660
getecateat gaégegteae titigteetee titeaagtete caaacagagt giegaeggea
                                                                      720
                                                                      780
geatetetea etgagaggte acettgetee cattaatttg aageaaattt cacetgatgt
                                                                      840
taaacacgca agtcaagcgc ccccgggaag ccatgcaaag ccagggggaa gggctttccc
tgaagageet eeeagettet tgteattaaë eaaggggeea eeaatgaeeg tggaaaaate
                                                                      900
ttetetggag acaaggttet getgtetgge egaaataate etteaceaaa gaaceeatga
                                                                      960
cctgctgggg ggactttggc ggtgccaaga aggtgggcca gtgatggggc gaccccagca
                                                                     1020
accegeteeg gegtategga eeceageega ggacaggeag aggteageat ggggeagggt
                                                                     1080
gegtteecte ceteactgtg etggegaafa acgaegeacg aattettitt gaeteteeca.
                                                                     1140
ggatactaaa atccgcagct atcgtcgtat caaatacata gtgcaccccc aagacttttg
                                                                     1200
aggaaaccac agagtettet ggatgcaatc agttacactg aggttgaaat ttagccagca
                                                                     1260
aaaataaggo aaagattgag gacadacaga dactaaccag cactttgtgo tttgaggtat
                                                                     1320
                                                                     1380
cacatttett gttaaggtte agaacgegga agaagteett ggcattttge tgggaaagtt
ggactccttc ctctgcagtc atacagctgt cacatgccag gcagtcgctc aaaaatatct
                                                                     1440
                                                                     1500
tggcatcage caacttgtgg aatteteest teteteeatt tteetggget ggacteggtg
categgetga cacattetet tggtcatcag tttttgtttt ettactacat teettgegeg
                                                                     1560
tgcagtgctc acacttcatc tggagcgcgg cgggcgggag gccgggcgcc tcagactcag
                                                                     1620
ggaagcaccg ggagactggg acaccactgc ccgccgcccg cggccctttg ttg
                                                                     1673
```

```
<210> 5569
<211> 2934
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2850)...(699)

<223> similar to gil665773 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5569
ttttttttt ttcgtgtggg ataatctatt ttaatgaaag tcattatat taatatttaa 60
caaaaagaat aaggaaaaa gacaaaaaca aaaatagata ttccagctta ataaaaagta 120
caactgagca ctgtgggctg gaggtgggat acccacccgc agcacgccca ccctaatgtg 180
ccatctgagg gcctggagaa aggacagtgg gaaggagaca gtaggctcag cccagagatg 240
cccctgtcct caggggctca atgtagtttg accctgacat taaacctttt atgtccttcc 300
cagtcaggaa ggtggctggg tacaggggtg ggggtgagga gcagagagag gtacagggca 360
ggaaggaaaa agtagaaggg tcctgaaggg caaattaggg tgggtaacta gggagttaaa 420
```

```
caggaqcaag aagettetat ttgtaateee aaaatetgge atgagtagag aaggaagagg
                                                                      480
aaatggggaa ggggtgatgg gaaaggggag cggaggaagg gaggcaattt atttatttct
                                                                      540
ccctgtctct tttggatagt tccactcttt tatgttaatc ccaatctgag acaggcccag
                                                                      600
ggaggttcca gtgacaaatt agtggttgtg tcccagtggg acagatgctc taggaagtga
                                                                      660
actgetgage tggcaagaaa agetggggte eteeteagta tgacacaget eetggeteee
                                                                      720
ggggagcaat gaaaaggaca tcagctttgg cattgatgca gtaggtgacg atgagggaga
                                                                      780
agatgaggat gccgaagccc actgtcaggg tgatcaactc aagctctttg ctggcgatga
                                                                      840
gaaatatccg ggcacggata tctttccagc ggctctcagt ccatgtagag tattcagtag
                                                                      900
agetecactg acteagttea aaggeaggag acaaggeeet ggetaategt geagtagaae
                                                                      960
gcacacaccg ggggagtegg tecgteteat tagaatgcaa agggeeetgg acceatgagt
                                                                     1020
acteatacag atcettgttt teaettggga etttaettgg atcetggeae tgeteteggg
                                                                     1080
tgaggttgac cactgtgcca gtcaaatttg ccaaggcata ctgtaacaaa cataaatggt
                                                                     1140
gttggtgggg ctggaaaaca gcgatgtaaa tgttgaaaga ggccccgtca ccccaagtaa
                                                                     1200
gacettaggt coetgeeetg aaggatagae tggaaccatg agttgttqqc tttaatcaqq
                                                                     1260
aaccccatag agcaggcggg taaccgtttg gggatcagcc tgaactgtgt cgctgaagtt
                                                                     1320
ggttcctcct gcaagetcat acagagcacg tcccagcacc gtggccacat ctgccagggc
                                                                     1380
cttggcagtg tcctgttaac caaagttcca ggtccctcct tcaagggctc aagccattcg
                                                                     1440
ggatagetea cattaatgtt eteageagtg tegtaaatae tetggtaata tttgttatgg
                                                                     1500
aaggcaccag agtggtcagc cagaacaacg ccagagatgt ttcgagctcg aagaaatcgc
                                                                     1560
tgcagggaag atggtgggag aggctgggac tgatttggcc tcctgaggat gacagcaggg
                                                                     1620
acaccageae caetettete caatgtggee aggagateet ceaeetggtt cegtacagae
                                                                     1680
teatttttet gagaaacagg atetgtgtge atecaaaget etaatgaagt tettaaggee
                                                                     1740
acctgtccca gctccacaaa tgagtcaaca ttctctaact gcacgggaaa cttgcccttc
                                                                     1800
tccatatcgt agaccatcct cgagctgcca atgtagtcaa aagtttcccc ttgaaaqaaq
                                                                     1860
acaaacatga cattgcgggg cagggtggtc acatcaggtg ccttttgcaa agcttcagca
                                                                     1920
gcagccagct gggtgacaaa ggaagccact gcgctttcag cccctggggc ccacattcca
                                                                     1980
gaaaaaggaa cgactatcca geegggtgge agcaaccaca accetgtegt caggetttaa
                                                                     2040
tgtcccagtt gtatttatag gctttagcat gctccacaca ttgtaatcag acagggggtc
                                                                     2100
acagacgatt tttgggttga tgctgaaggt gctttggatg gagctgcgcc gcatgccagg
                                                                     2160
tggcagtgct gaatgacagc catgccatgt gtgaaaagag ctgcatggca catagtggga
                                                                     2220
aggttggtgc tgagccattc tgactcaggt tgtgatcttg atagcactgc ttgatgactt
                                                                     2280
tggtttcatt ttcatcttca agaagaaaga tggggaaact aaagtcttca taagccaaac
                                                                     2340
cattgcccag cgaattccac tgtatttctc tgcagtgagc aaactctggc ccataggaat
                                                                     2400
tggagtaaac accaaaccca tcatttgggc actgtacact aggagagaag cctgaggcag
                                                                     2460
gactgggctt ggtcaaggac actgcaagac cagcaattcg gctggttctc cctttcagct
                                                                     2520
tetecattaa ateeetggta aaatgettge tetecageag aaceatgtaa ggggggttgg
                                                                     2580
ggccatcagt caatacccac tgtaggtcct cetetttete tactacgtgg ataacccetg
                                                                     2640
tgtctccact aattgaagac tggcagccaa tctgatgagt ggcgttgagc aggcgaacac
                                                                     2700
agggagetgt tttatttaag gggatatata tetteetete eaetgagttt eeeetgeaca
                                                                     2760
aacctgctag taggacgcag aaagacagaa ggcgaaggag accccgactt cccgggtcag
                                                                     2820
ccccagagcc acccctgcc gtagccatct tgcctctctg ctgagcgaaa gcccccgttc
                                                                     2880
ggeteetgte tgttagegge etetetagge taccactgae accgtetetg tgge
                                                                     2934
```

```
<210> 5570
<211> 3786
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (385)...(3787)

<223> similar to gi4324434 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5570 gtccgaattc ctggtcgacg atttcgtcaa atggcggcgg cggcggcggt ggcctggtgt 60 taaggggaga geeaggteet cacgacceet gggaegggee gegetggeee geggeageee 120 eccegttegt eteccegete tgecceaeca gggataettg gggttgetgg gaeggaetet 180 ggecgeetea gegteegeee teaggecegt ggecgetgte eaggagetet geteteeeet 240 300 ccagagttaa ttatttatat tgtaaagaat tttaacagtc ctggggactt ccttgaagga tcattttcac ttttgctcag aagaaagctc tggatctatc aaataaagaa gtccttcgtg 360 tgggctacat atatagatgt tttcatgaag aggagtgaaa agccagaagg atatagacaa 420 atgaggeeta agacetttee tgecagtaac tataetgtea gtageeggea aatgttacaa 480 gaaatteggg aatecettag gaatttatet aaaceatetg atgetgetaa ggetgageat 540 aacatgagta aaatgtcaac cgaagateet cgacaagtca gaaatecacc caaatttggg 600 acgcatcata aagccttgca ggaaattcga aactctctgc ttccatttgc aaatgaaaca 660 aattettete ggagtaette agaagttaat ceacaaatge tteaagaett geaagetget 720 ggatttgatg aggatatggt tatacaagct cttcagaaaa ctaacaacag aagtatagaa 780 gcagcaattg aattcattag taaaatgagt taccaagatc ctcgacgaga gcagatggct 840 gcagcagctg ccagacctat taatgccagc atgaaaccag ggaatgtgca gcaatcagtt 900 aaccgcaaac agagctggaa aggttctaaa gaatccttag ttcctcagag gcatggcccg 960 ccactaggag aaagtgtggc ctatcattct gagagtccca actcacagac agatgtagga 1020 agacetttgt etggatetgg tatateagea tttgtteaag etcaceetag caaeggacag 1080 agagtgaacc ccccaccacc acctcaagta aggagtgtta ctcctccacc acctccaaga 1140 ggccagactc cccctccaag aggtacaact ccacctcccc cttcatggga accaaactct 1200 caaacaaagc gctattctgg aaacatggaa tacgcaatct cccgaatctc tcctgtccca 1260 cetggggcat ggcaagaggg ctatecteca ceaeetetea acaetteece catgaateet 1320 cctaatcaag gacagagagg cattagttct gttcctgttg gcagacaacc aatcatcatg 1380 cagagttcta gcaaatttaa ctttccatca gggagacctg gaatgcagaa tggtactgga 1440 caaactgatt tcatgataca ccaaaatgtt gtccctgctg gcactgtgaa tcggcagcca 1500 ccacctccat atcctctgac agcagetaat ggacaaagcc cttctgcttt acaaacaggg 1560 ggatctgctg ctccttcgtc atatacaaat ggaagtattc ctcagtctat gatggtgcca 1620 aacagaaata gtcataacat ggaactatat aacattagtg tacctggact gcaaacaaat 1680 tggcctcagt catcttctgc tccagcccag tcatccccga gcagtgggca tgaaatccct 1740 acatggcaac ctaacatacc agtgaggtca aattetttta ataacccatt aggaaataga 1800 geaagteact etgetaatte teageettet getacaacag teactgeaat tacaccaget 1860 cctattcaac agcctgtgaa aagtatgcgt gtattaaaac cagagctaca gactgcttta 1920 geacetacae accettettg gataceaeag ceaatteaaa etgtteaace cagteetttt 1980 cctgagggaa ccgcttcaaa tgtgactgtg atgccacctg ttgctgaagc tccaaactat 2040 caaggaccac caccacccta cccaaaacat ctgctgcacc aaaacccatc tgttcctcca 2100 tacgagtcaa tcagtaagcc tagcaaagag gatcagccaa gcttgcccaa ggaagatgag 2160 agtgaaaaga gttatgaaaa tgttgatagt ggggataaag aaaagaaaca gattacaact 2220 tcacctatta ctgttaggaa aaacaagaaa gatgaagagc gaagggaatc tcgtattcaa 2280 agttattete etcaageatt taaattettt atggageaae atgtagaaaa tgtaeteaaa 2340 teteateage agegtetaea tegtaaaaaa caattagaga atgaaatgat gegggttgga 2400 ttatctcaag atgcccagga tcaaatgaga aagatgcttt gccaaaagaa tctaattaca 2460 teegtettaa aagggetaaa atggacaagt etatgtttgt gaagataaag acaetaggaa 2520 taggagcatt tggtgaagtc tgtctagcaa gaaaagtaga tactaaggct ttgtatgcaa 2580 caaaaactct tcgaaagaaa gatgttcttc ttcgaaatca agtcgctcat gttaaggctg 2640 agagagatat cotggotgaa gotgacaatg aatgggtägt togtotatat tattoattoo 2700 aagataagga caatttatac tttgtaatgg actacattcc tgggggtgat atgatgagcc 2760 tattaattag aatgggcatc tttccagaaa gtctggcacg attctacata gcagaactta 2820 cctgtgcagt tgaaagtgtt cataaaatgg gttttattca tagagatatt aaacctgata 2880 atattttgat tgatcgtgat ggtcatatta aattgactga ctttggcctc tgcactggct 2940 tcagatggac acacgattct aagtactatc agagtggtga ccatccacgg caagatagca 3000 tggatttcag taatgaatgg ggggatccct caagctgteg atgtggagac agactgaagc 3060 cattagageg gagagetgea egecageace agegatgtet ageacattet ttggttggga 3120

```
ctcccaatta tattgcacct gaagtgttgc tacgaacagg atacacacag ttgtgtgatt
                                                                     3180
ggtggagtgt tggtgttatt ctttttgaaa tgttggtggg acaacctcct ttcttqqcac
                                                                     3240
aaacaccatt agaaacacaa atgaaggtta tcaactggca aacatctctt cacattccac
                                                                     3300
cacaagctaa actcagtcct gaagcttctg atcttattat taaactttgc cgaggacccg
                                                                     3360
aagatcgctt aggcaagaat ggtgctgatg aaataaaagc tcatcccatt ttttaaaacc
aatttgactt ctcccagtga cctgaagaca gcaggtcggc tttcaaacaa ttcccctaaa
                                                                     3480
atcacaccac cccaacagat acatcaaatt ttgatccttg ttgatcctga taaattatgg
                                                                     3540
agtgatgata acgaggaaga aaatgtaaat gacactctca atggatggta taaaaatgga
                                                                     3600
aagcatcctg aacatgcatt ctatgaattt accttccgaa ggttttttga tgacaatggc
                                                                     3660
tacccatata attatccgaa gcctattgaa tatgaataca ttaattcaca aggctcagag
                                                                     3720
cagcagtcgg atgaagatga tcaaaacaca ggctcagaga ttaaaaatcg cgatctagta
                                                                     3780
tatgtt
                                                                     3786
```

```
<210> 5571
<211> 6143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5492)...(2924)
<223> similar to gi1944416 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5571 cctgttatca gagagtaggg ccccctcagt ttatcgttta gacatcgcta agtgaaaaac 60 agaagaccag gtttatttca tacaatgtta ttcacacatt tttcattttc taatttatac 120 ataatataca aagaagtgaa gttaaccatt atttcatatg aaccaataag agccaggact 180 tagacaaact ggtccagaaa caatccctat caaaaggaga cactcaagag taaagcctag 240 gtagttttgc ccaattgttt tattctgaaa tgtgattttc agattttacc aaaatttcat 300 gccaacttac taaaaggtaa aaattggggt gggcacccaa aatggcagac tgtaaaattt 360 ctacaagaac aggtactttt gtagagcagg cctgaaagta ttgggaagat tgggttgtca 420 gcactgggac aaatgggaat gagtatcagg accccaagaa gagggtttag tttctcaatg 480 tagtattete taettgteat tttetaaaat tgeagagata atgeetgtge caacagaggg 540 caaggatgaa ggaagactag gaattcaact gtacaaagac aggaaagcca ttaccaatct 600 ccaacatgac agetttgate etgaaaccat gggetgatae tgagaacaaa agttegatae 660 gggccgaaat actctgaggt tggtaaagta ggaaaaagtg agacagcggc tttgtgtggg 720 ttttaaaaaa atgaaacaaa cacaaggcgt tgctgcagtg actgggacat gctgatgacc 780 cagagtgact atgagaagga acggtgacaa gtgtttggat ttaatggtct caccaaqqaa 840 tgttgggtta gaaaagtaaa ataactcaac accaaacatg aaaaagtatg cctggcatcc 900 ccaaacttta tgccattatt tttaggttca taatatgaac aactaagtga taaaaccttt 960 agatteeata tigigeteag aagatigegi tietteigea gatetetagi aaaaaaagat 1020 ctcttccata ttcagctgac agaatagcat gttcatttta gttttcagca ctgaacataa 108Ô gtgggtcaac ataaatgttt atacaaaata ctgacttcaa caaaatacaa agcactttct 1140 ttatetttea gaaactgaat atacacagca agttttttte caaaatattt teataggeaa 1200 aggattaaaa acgattttaa ttatacacat atggtcacaa ttttgcctta aaaagattgt 1260 tgggaaatgt acataaggcc gcttgtaaat gtacatcgtg ttactgttat gtcttatgtc 1320 cagaggaaaa aatgttatca tacagatttg ctcttacttg qqaqtaqqct attcaaaaat 1380 acagtactct totgtacaaa gaaaaaagtc acatcacatt taataagatg aaaaaagcat 1440 tggcctccat ggtaaccaaa tatctcagtc caatactttc tattatgcac aataccctqa 1500

```
cttcaattga aagtgatcca aattctagca ggtccatatt aacagtcaac aactatgtta
                                                                     1560
taaaacaaaa tgatctcaca ataataaaaa gaaagctggt tcatacttct gaaaccatat
                                                                     1620
aaagataaaa aatttttaaa aaatcactct cgatttggag aaataaattt acattataca
                                                                     1680
acactatatt gccaggtcaa agagggcagg gacgtaaatg tacactaaaa tgcaaatgta
                                                                     1740
tcccaaagag ataaaacaaa ttccatttac agcatgaagg tttacaaatg tacacctgta
                                                                     1800
caaccaagga aagcatcact actaaattag caaggctttt ataataaaca ttgaaacaag
                                                                     1860
atttcctttc aaagtgtaaa cttacatcta ttactacaca cacaatgcat atatttatag
                                                                     1920
aaagcaaaaa gagctatctg aatatgtaat catgcttaaa tgctgagcta tcaaattcac
                                                                     1980
                                                                     2040
ttttcagtgg ccccttttca tctctatctg gttcctactt tctgcctcta tgaaaaagca
aaataaagct caacacttcc tcaacatgtc tgtaattcta taagcaaaac aaaatacaaa
                                                                     2100
tttccactct ttctcattgc aaaccaaact gaaaagttaa taagtgactt aacttttcat
                                                                     2160
ttagtgcact taattggaag tgtcaccatg attttgtatt taactcttac aacaattaca
                                                                     2220
tatgtaagta tatacaatat ttctgtacat tgccagagac attttagggc agtaattgta
                                                                     2280
ttaaaaccac atctactgta aataatgtta ggttcttttc atctcaaacc actttattct
                                                                     2340
tgtctactta ctcgttattt gcatgatagt ttgtgaatta tcaaaataca acttaactct
                                                                     2400
ttttaaaata ttaataatat ttatgcagtt gattgttaat ctgttataaa aggtttcacg
                                                                     2460
caaaggaaaa aaataaggac tataatticta tatacatctic tataaacctg ttgtgctatg
                                                                     2520
gggttgtaga cctaccagac tgtgagccag tttattaaaa gaatactgta ctttttcctt
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taaaaactat ttttgtgact ttacaaggta aaaatttaca aaatatgtga cagcttttta
                                                                     2640
tttttgatac agttacatca tatacaggca ttctgtgctt tgccagcaat ccaatctgat
                                                                     2700
aggtetecae teagggetga atataattta taatteatee eeceeecee aaatatacae
                                                                     2760
aagaacctta aaaaatttac aaatggatga ataaagtcaa taaatagttt tgctttaaaa
                                                                     2820
aaaaattgaa gattcatagt tgagttgtgt tttgataatt cacacacaaa aaaattcttt
                                                                     2880
tcacatggtt aaattatett etttetettg eteetgtaat ttacageatt ecatttggtg
                                                                     2940
gteeteeaat aggteetagg teegggetat tetteaaata ataettttee aacttggeea
                                                                     3000
gtatatgett ecegtatgig tattigegea aagtagtaat gigaggiega ateitgigea
                                                                     3060
tgattatett tetetgagea ggtteageea tateaateat ettttgaace aegtaattgg
                                                                     3120
catactggtc cttcatcatg gtgtataagg cactgtgagg accatcattc tggcagcaaa
                                                                     3180
cetegteaat cagtaaaget eteteageae gggaggeatg agtaacacae ttttetaeta
                                                                     3240
cattgctggc aaatttgtgt tgactcaggg ctaaaacctt tcccctgatt tcggaaacaa
                                                                     3300
ttttgctctt gtcttcaggt cgaccgtgtt ccagtacatg ctgaataaca taattgccat
                                                                     3360
actgatcctg taccaactgc tetgtatgtt ggtggagttc ttctaagata ggtaaggtct
                                                                     3420
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```

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<210> 5572
<211> 1098
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (402)...(848)
<223> similar to gi1335008 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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                                                                      120
gggagaagtg aacagggatg cagagcgaat gccagtttca gccaactcca aggacagccc
                                                                      180
tggagctgga atggccttta gagctgcccc atggtgacag aggtggccag gcttctatac
                                                                      240
ecctaegtgg atcactcact gtgcttgggc accttgggaa agggcatggc tttgagcaaa
                                                                      300
aggetetetg cagetgagge aacceetaaa agggetgaeg getgaagtet gtetgetgae
                                                                      360
cactgtccca gcagctgggg cttgttagtc cttcctcaaa gggggatcca gatggcatgt
                                                                      420
cacagtgtct accgtaaatg ctcactgaat ccagctgcaa tgcaggaaga ctccctgatg
                                                                      480
tgatcatgtg tctcaccctt tcaagctgaa agcaacagta cagacgatga gaccgacgat
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cccaggacgt atcagaaata tggttacatt ggaacacatg agtaccctca tttctctcat
                                                                      600
agacccagca cactccaggc agcatccacc ccacaggcag aagaggactg gacctgcacc
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tagataacat tetecacage etcactteat tecacetatt etetgaaaat atteeetgag
                                                                      900
agagaacaga gagatttaga taagagaatg aaattccagc cttgactttc ttctgtgcac
                                                                      960
```

```
ctgatgggag ggtaatgtct aatgtattat caataacaat aaaaataaag caaataccat 1020 ttattgggtg tttattaact tcaaggcaca gagccaagaa gtacagatgc atatctaggg 1080 gtattgtgtg tgtatata 1098
```

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<210> 5573
<211> 8527
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (8528)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (8438) ... (432)
<223> similar to gi29865 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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```
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ccttttgctt ttccacttca tcaataaaat ccatttcaaa tttattgatg cattcatgtt
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<210> 5574
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<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (34)...(365)
<223> similar to gi4680709 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5574 tgattacgga agaaccagga gtttggcgtg accatgggga agcaaaagaa aacaaggaag 60 tatgegacca tgaagegaat gettagtete agagateaga ggettaaaga aaaggataga 120 ttaaaaccta aaaagaaaga aaagaaggat cccagcgcat taaaggaaag agaagttccc 180 caacaccett cetgettatt tttecaatat aatacacage tgggeccace ttaccacate 240 ctcgttgata ccaactttat caacttttcc ataaaagcca aactggactt agtgcagtca 300 atgatggact gtctgtatgc caagtgtatc ccatgtataa ccgattgtgt aatggctgaa 360 attgagaaat tggggcagaa gtatcgagtg gctctaagga ttgccaagga tccaagattt 420 gaacgattac catgtacaca caaagggaac ctatgcagat gactgcttag tacagagagt 480 aactegecat aagtgttaca ttgtggecae agttgacegg gacetgaaaa gaagaateeg 540 taagatteet ggagtteeta teatgtaeat ttetaaceat aggtgagaaa ttteeettigg 600 agaagggaat agaaatatat aattgatatc äattgaaaat gaggataagt gataaggtta 660 taaaggattt gaaagaaatt attgtatcaa atgtttacat agttatattt gaagaaatga 720 gacaaagcaa gagcaagagc aaaagagaga gataggattt aaggaatgag gcaaacattt 780 aaattgttag agtaagatta etggaagaaa tagaegtatt gttttaaata aaageagtaa 840 tttaaatcaa gotaatottt tüggooagaa ataootgiit tgaaagatti tiitttättä 900 acacttcatc tgagaaatgg aaagcttatt taaaaaaaaa 940

```
<210> 5575
<211> 1595
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature.
<222> (407)...(687)
<223> similar to gil710216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5575
ttttttttt ttgtattcat tatctgtgtt ctcttgtatc tccctgagtt tctttaataa

```
cattattctq aatttttttc aggcatttca tagattttct tttcattgga tctqttqctg
                                                                      120
gagaattatt gtgcttcttt ggagatgtta tgtttccttt ttcatatttc ttgcatcctt
                                                                      180
atgtgactat ctgtgcctct gacataacag tcatttcttc caattttatg gattggcttt
                                                                      240
tatatgggaa agaccttttc ttatagctct atctacagtg ttcattggat atcacacttt
                                                                      300
ggctttgatt ctgggtgggt acagtggtat agtctgcata tgattccttc agctgtaatt
                                                                      360
ggcatgagtg gtgcctgtga gtcattcagt ggcttagact gcagtgtttt tttttgtggt
                                                                      420
tgttgagatg gagtctagct ctgtcaccag gctggagtgc agtggcacaa tctcagctca
                                                                      480
cegeaacete tgeeteeegg gtteaageaa tteteetgee teageeteet gagtagetgg
                                                                      540
gactatagge acgtacaace atgcgcaget aatttttgta tttttagtag agatggggtt
                                                                      600
teactatgtt ggceaggetg ctctcgaact cctgacctcg tgatctaccc gcctcggcct
                                                                      660
ctcaaagtgc tgggattaca ggcgtgagcc accacacttg gccagactgt agttgttatt
                                                                      720
ggaggetgtg gtgaggettt getgaggatg gggatgeeag gaagtettgt cetteageat
                                                                      780
cagtggtagc ggtggtggac caggtgtgtc aatactaggg actgtgggca gtgtttgtgg
                                                                      840
gcactgatga tagcctgtct gcgtgggcca atccctgggc ctccaggtgg ctcctttggt
                                                                      900
tgctggcagt ggcagcactg ggccaagtgg gcaggtgcac cactgggctc ctgggtggtg
                                                                      960
tgcgtggcag gctgatctct agttctccag gtgacatatg caggttctgg tggtgggtag
                                                                     1020
gcaggcattt cctcaggcct ctcagtagta agtgtgagca ctagctctgg aggcagatga
                                                                     1080
gtcaatctcc aggcccccag atggtacatt caggcaccag catattccta tgcatttcta
                                                                     1140
gataaaagta tttttcagaa aacctgagca tatgtcctat taatacaact taccctcatc
                                                                     1200
agetetgeat gagaagaagg egtaatteee teagtagaae agteagaatg gaateaeaga
                                                                     1260
cttgttttga gccagtcact ggtgaggggg ggtaggataa aatgataagc tcagaatcta
                                                                     1320
aaccttagac tagggaatgg caaacttttt ccataaagag gcaaacggta atattttagg
                                                                     1380
ctttttgtgt agataacctc ttttgtagtg acacagtggt gccatcgtag cctaaaaacg
                                                                     1440
tatgtagaca atggataaat caatggactt ggttttattc cagtaaaact taatttatac
                                                                     1500
agtcagaggg ccagatttgg cccttggtct atagttggcc aaccctgttt agagcagtca
                                                                     1560
aaatttattc cctggggctg ggccaacttt ttctt
                                                                     1595
```

```
<210> 5576
<211> 2435
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1450)...(683)
<223> similar to gi5420389 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5576
tttttttttc attcacacac ttagcatatg caattttaat caaccaaaag aaaatcccaa
                                                                       60
atgtacaagt gaaaaaaatc caaactgttg acacaggcct aactaatatc agctactttt
                                                                      120
atgtacaget gtatagttea aaaaagetat eetatatgta tatacaaaag tigtttatae
                                                                      180·
acaggicigt acataagggi ctatacatti atticcicag aacccttagg igccacctct
                                                                      240
tggtgaggac accaacactt cattcacata tcttacaaaa aagaaagacc atttccagga
                                                                      300
ttgacaacat tgtgcatcct gtattcagac aatgtacact ccactcgact ggttaagatc
                                                                      360
cttccatcat aatgcggacc acaccagatg catgggttcc accaaacagc ttcacacaga
                                                                      420
gtgctccaaa gtaaaagccc ataaaccaac ccgagatgaa gcagggtcct gcccagtgtg
                                                                      480
ccaccacagg teegggetta gttgagtetg cetgeeetge teactgtegg tattecaatt
                                                                      540
catctacact gataactttg gegggeatgg agggeagggg ttgetgtage acatetgage
                                                                      600
caaaccattt ggcaaggccc acaggggagc tgctcctctg gctggggcga tgctccagct
                                                                      660
```

```
720
gggagtgcat qtggggcagg cctgaccggc tgggcacgtt ctgaggggtt gtctgaacgc
tgacagetge tgeatgggaa ceagageetg gaggatgeag aactgagege tgtagetget
                                                                      780
gttgcaccat tgccagatgc agaggtgttc caggacgagg gtttaagaga gggtgactag
                                                                      840
cagcaggtaa agggtaaaag ggctgaccca ggatggggcc agatattccc tgtaaatgac
                                                                      900
tcaagtccat cccaggagga agcacaccag tttggagcaa acttggaaga tgctgtggat
                                                                      960
gtactccctg ggccagcatc ctctgtacca accctgggtg aagctggtga gcaggcctaa
                                                                     1020
ccatagggac atgggggaca aggggaactt ggtggacagg gcggagaaaa ggtgttgtag
                                                                     1080
gaactgggga tgccaaggtg ggtgtttttc tcccagttgc tttaggtcga taatcttgtt
                                                                     1140
ctttggtgta acggttggcc tgggacagtg gggtggaaca cgaagacctc tgtaatgctg
                                                                     1200
                                                                     1260
acagtttgga atttgtagtg ggagaagagt ctcgatcggc actgggtaca gagctggatg
acaggaggtt ttcttcactg gccttctgag tatcctcttt actgtcacca agagctgctt
                                                                     1320
ttccagatgc tggctcctcc ttgcttttct ctttgctctc gtacatctta cgaatcactg
                                                                    1380
aggtaggggt aaaggaagga gaaagcatgc ttgtgatgga ggcagcaggg gcaggggaag
                                                                     1440
aggaattece tegatgeacg ggtgetggtg acttggteac tegetgttge etgtttetga
                                                                     1500
atccatctct ggttctgtcc acctgtggtt tgccaaaacc aggctggtag aagtttgctg
                                                                     1560
cctgtacagc aaggtcatgt ggcaaggcca gcccttctaa agctgcctgt tgcaactcca
                                                                     1620
getggeteat etgetggget gtgatgggge teatgggttt gegeatgeet tggaatggat
                                                                     1680
ctccgagtag ctgctgtggt cctggtgtga aaccaattgg.tgatggtatt cttgggcgaa
                                                                     1740
ggtagtcagc tgaggctgct cgagtttgaa acacctgtga caagggagga gagggtgctc.
                                                                     1800
tttggcccag taaagatgtt gtaggctcca agctccccat aaggccactc agaagattgg
                                                                     1860
aagaagcagg tototgaact ggttgaccca gaagttootg caggatgtto ttagggacag
                                                                     1920
getggeetgg aateteagea ggggacatea aatggettte aaggtttegg etgaetttgg
                                                                     1980
gctgagaagg caaagtccca cttgccttca ttgtgctcac tagcttgttg aacgcagtca
                                                                    2040
tgtctccgtc tttcttcagt tgtcgattgt tggttacggc actcaaggtc tcttctaggt
                                                                    2100
gttctgccat gaagggagtt gaattcttca cttgctggtc aaccttcaag cccttcagac
                                                                    2160
etgettetae etectecaet gaaageacaa eccetgaatg tgagetttet ttaagttttt
                                                                    2220
ctttatttgc agaaaggctg gaaagaagag gtttcaaatc cactttggct ttctgtagca
                                                                    2280
tttctaaaat atccacttta ttttcagcat ggtcttccaa tggtatagga gcaaagtaat
                                                                    2340
teccegagtt etgtecagga gagaggatgg ettgetecag acetgeaagt etetetaget
                                                                    2400
cttcatgtgg tgttgaccca agactgctgg atcgg
                                                                    2435
```

```
<210> 5577
<211> 1640
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (35)...(1461)
<223> similar to gi182923 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5577

cggacgcgtg ggattctttt aatcagagtt agtaatgtgg acagtacaaa atcgagagag 60
tctggggctt ctctcttcc ctgtgatgat taccatggtc tgttgtgcac acagcaccaa 120
tgaacccagc aacatgtcat acgtgaaaga gacagtggac agattgctca aaggatatga 180
cattcgcttg cggccggact tcggagggcc ccccgtcgac gttgggatgc ggatcgatgt 240
cgccagcata gacatggtct ccgaagtgaa tatggattat acactcacca tgtatttcca 300
gcagtcttgg aaagacaaaa ggctttctta ttctggaatc ccactgaacc tcaccctaga 360
caatagggta gctgaccac tctgggtacc agacacctac tttctgaatg acaagaaatc 420
```

```
atttgtgcat ggggtcacag tgaaaaatcg aatgattcga ctgcatcctg atggaacagt
                                                                      480
tototatgga otocgaatca caaccacago tgcatgtatg atggatotto gaagatatoo
                                                                      540
actggatqaq cagaactgca ccctggagat cgaaagttat ggctatacca ctgatgacat
                                                                      600
tgaattttac tggaatggag gagaaggggc agtcactggt gttaataaaa tcgaacttcc
                                                                      660
tcaattttca attgttgact acaagatggt gtctaagaag gtggagttca caacaggagc
                                                                      720
gtatccacga ctgtcactaa gttttcgtct aaagagaaac attggttact tcattttgca
                                                                      780
aacctacatg ccttctacac tgattacaat tctgtcctgg gtgtcttttt ggatcaacta
                                                                      840
tgatgcatct gcagccagag tcgcactagg aatcacgaca gtgcttacaa tgacaaccat
                                                                      900
cagcacccac ctcagggaga ccctgccaaa gatcccttat gtcaaagcga ttgatattta
                                                                      960
totgatgggt tgctttgtqt ttgtgttcct ggctctgctg gagtatgcct ttgtaaatta
                                                                     1020
catcttcttt gggaaaqqcc ctcagaaaaa gggagctagc aaacaagacc agagtgccaa
                                                                     1080
tgagaagaat aaactggaga tgaataaagt ccaggtcgac gcccacggta acattctcct
                                                                     1140
cagcaccctg gaaatccgga atgagacgag tggctcggaa gtgctcacga gcgtgagcga
                                                                     1200
ccccaaggcc accatgtact cctatgacag cgccagcatc cagtaccgca agcccctgag
                                                                     1260
cageegegaa ggeetaaggg egegeeeegg aceggeaegg ggtacecage aaggggegea
                                                                     1320
teegeaggeg tgeeteecea geteaaagte aagateeceg aettgaetga tgtgaattee
                                                                     1380
atagacaagt ggtcccgaat gtttttcccc atcacctttt ctctttttaa tgtcgtctat
                                                                     1440
tggctttact atgtacactg aggtctgttc taatggttcc atttagacta ctttcctctt
                                                                     1500
ctattgtttt ttaaccttac aggtccccaa cagcgatact gctgtttctc gaggtaagag
                                                                     1560
atteageeat ceaattggtt ttaggtettg catateagtt ttattactge accatgttta
                                                                     1620
cttcaaaaag acaaaaaaa
                                                                     1640
```

```
<210> 5578
<211> 2020
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (268)...(1419)
<223> similar to gi4220483 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5578
tagtcgattg tcacgtggca ggccagggga aggcgggact tccggcggcg aggtaaattt
                                                                       60
ttttttttt tttttttt tttattttct tccggtggct ggtctccggc ggccccgtcc
                                                                      120
cegactggge ceegtgeete eeegeeeeeg egteeeeeg eegeaagaee gageegeeae
                                                                      180
catgaagaaa ttctttcagg agttcaaggc cgacatcaag ttcaagagcg cgggacccgg
                                                                      240
tcagaagctc aaagagtccg tgggggaaaa gacccacaaa gagaaqccca accaqccaqc
                                                                      300
ecccaggeeg eccegecagg gacceaceaa tgaggeacag atggeageeg etgetgeeet
                                                                      360
agcccggctg gagcagaagc agtcccgggc ctggggcccc acatcgcagg acaccatccg
                                                                      420
aaaccagggc tgccttccag tgagaaagga acttcaagcc gaagccaccg tcaqcqqqaq
                                                                      480
ccccgaggcc ccagggacca acgtggtatc tgagcccaga gaggaaggct ctgcccacct
                                                                      540
ggetgtgeet ggegtgtaet teacetgtee geteaetggg geeaeeetga ggaaggaeea
                                                                      600
gegggaegee tgeateaagg aggeeattet ettgeaette teeacegaee cagtggeege
                                                                      660
ctccatcatg aagatctaca cgttcaacaa agaccaggac cgggtgaagc tgggtgtgga
                                                                      720
caccattgcc aagtacctgg acaacatcca cctgcacccc gaggaggaga agtaccggaa
                                                                      780
gatcaagetg cagaacaagg tgtttcagga gegeattaac tgeetggaag ggacecaega
                                                                      840
gttttttgag gccattgggt tccagaaggt gttgcttccc gcccaggatc aggaggaccc
                                                                      900
cgaggagttc tacgtgctga gcgagaccac cttggcccag ccccagagcc tggagaggca
                                                                      960
```

```
caaggaacag etgetggetg eggageeegt gegegeeaag etggaeagge agegeegegt
                                                                    1020
ettecageee tegeceetgg eetegeagtt egaactgeet ggggaettet teaaceteae
                                                                    1080
agcagaggag atcaagcggg agcagaggct caggtccgag gcggtggagc ggctgagcgt
                                                                    1140
getgeggaee aaggeeatge gggagaagga ggageagegg gggetgegea agtacaaeta
                                                                    1200
caegetgetg egegtgegee teecegatgg etgeeteetg eagggeactt tetaegeteg
                                                                    1260
ggageggetg ggggeggtgt aegggttegt eegggaggee etgeagageg aetggetgee
                                                                    1320
ttttgagetg etggeetegg gagggeagaa getgteegag gaegagaace tggeettgaa
                                                                    1380
cgagtgeggg ctggtgeeet etgeeeteet gaeetteteg tgggaeatgg etgtgetgga
                                                                    1440
ggacatcaag geegegggg eegageegga etecateetg aaaceegage teetgteage
                                                                    1500
categagaag ctettgtgaa ataaaagcag ggttggcete agceetgtgg gtetgtetea
                                                                    1560
tgetetecet gitectetee eegecaceee agggeeteea agecacetet ggaaataett
                                                                    1620
ggetetgeec catgggeacg ggaggggege cageegtgga getgtggaat tgggeecegt
                                                                    1680
ggcagagece ceatecettg ggggetgtgg ggatgegeec aageeeeega gggagaggee
                                                                    1740
tgggggacacc aacaaatcta agccctccct agctgcttgg taactgtgtc atgaagctgc
                                                                    1800
cggacagaca cacgtggcat ctccctgggc aggagagcag gcctgcagca tgggtcccgt
                                                                    1860
tecegtgtge egtgggtgge agtggetgea cetggeacta gggetgetet gtggatgtgg
                                                                    1920
gtgacaacgg caggagggga cgctggcctt cctgcacata gacctgcagt tagtaaatca
                                                                    1980
taagcccaaa taaacaggtt gtttgaatat aaaaaaaaa
                                                                    2020
```

```
<210> 5579
<211> 861
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (745)...(191)
<223> similar to gi505096 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5579
tttttttt tgcaaatcag cagatttatt gaggccacca gcgccactgg ggagcagcgc
                                                                      60
gcgtgtgcgg agggggtggg gcctccccag ggtccatgaa gtgctcggcc cttcccaggc
                                                                     120
atgcagteet gegeageegg agggggatge geagggaetg egetgtggge geegatggte
                                                                     180
agecatggte agtetgteeg dagecagetg coetteteet ceaecteett ggteactace
                                                                      240
agcagcacct cgcacaggcc ctgggccagc gcagccgcca ggaaaggccc ctgactccgt
                                                                     300
ceteaatece ccagggeett egggegeeeg cagetttgga gtecaggttg tagtaagaca
                                                                     360
cegttecaac etggegeagg gecacetaag atgeegeegg egeageggea gtgaeageag
                                                                      420
ccccagegae acgggegagg gcaggttcag gatcagecec agtacetggg gcagggccag
                                                                     480
ctgggacagg ggcctcctcc tgtcccacca cacggcggcc aggcccagcc cctgcagagc
                                                                     540
ggccatgate acattgacat catagttgcc ggtgcccagg aggctgcgat gagggttcag
                                                                     600
ccgggagtet ggggccaace tettgcagat etcateggca geeteetgge taaagagetg
                                                                     660
ctgctgcaga acgttgttga gggcgtggac agcacacagc tccaggcgct gccgttcgtg
                                                                     720
gtacacggtg ggtgggctcg gctgtgctcc cggggcctgg gacatgccgt cctcggctcc
                                                                     780
tgcccgcctg cctctccgct ccaccgagcc aggggtttcc gcatcccctt cctgggcggc
                                                                     840
ggctcgcgat ctagaactag t
                                                                     861
```

```
<210> 5580
<211> 6204
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6085)...(2968)
<223> similar to gi3800881 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5580
ttttttttt ttaactgatg ttttaaattt aagtcattta ttttacaaac agagactacc
                                                                       60
tattataett aagacattgg gttagatett tgecaaagae atggtttagt catacetaat
                                                                      120
gtaatccatt ttttaacttt ccatattaat ttaattttta attcattttt ctttatgctt
                                                                      180
getteagggg ctacatetgg gaetgaatag cagcatatgg cecaaggget, ggtgggtttt
                                                                     . 240
gccactcatg ctctatactt ttagtctttt ccagagttga gtatagcagt cacgtatcgt
                                                                      300
taatacaggg tgtcactatt ttattacctg gcagagaaac aggattaact tcctttattt
                                                                      360
aatactgata aatagaaagg ctttttcaag aaaaaaaaag aaagcttaca tttacaaaag
                                                                     420
tgatttatgg taatatgtgc cattaacaaa gacaaatact gaaatccaca caaaatcaga
                                                                      480
attaacttct acaactaaaa aaaaattaca gggtaataaa actgtaggaa aagctgtatg
                                                                      540
taaaaagaaa aaaagacaag tooctatgta gotaattaca agagaatatt gtaaatacat
                                                                      600
tcaaaaaagt tttccaaaaa tcctgcagcc tcatctagaa actgatacat gttaagattc
                                                                      660
ttgatetata ecaaattata atgttaaagg aaateatgaa aaetgaggta tatatttgat
                                                                      720
gcattagaaa ctatcatttg aacactattt aaatagttta attataaggt ctaatttcaa
                                                                      780
gttaaagtet gtaaaeggag attagtttgg attatatgae acaggagaea ataaaacatg
                                                                      840
ttctcaaaga catgccaata cattttcttg aaacaaaacc tcagcaaatg agaattttca
                                                                      900
tactgtgcat gggaataact aaaaccttta ttagatatga ttttccatta acaataatgt
                                                                      960
gaaaattaga attatgaatt caaaaagcag tgaagtctga aaatttaaaa agtagactag
                                                                     1020
gtattagggg attaaaggta aaggaagacg agaatgtttc tttaatacta ttcattattt
                                                                     1080
cccctctgta cacaatgttg catatataca actacttcat ttttattgac tttatataat
                                                                     1140
agtgaaatcc ctttaagcaa cctagggtat acagttggtg tccaactttc aggggatttt
                                                                     1200
cggggggggg tagaaacact tgattaacag ttttcaccca cacacgttag acaatttttt
                                                                     1260
tetttttttg ceaagatttt agtagtaaat teataaatat aggaaataet tteaeteett
                                                                     1320
cagtgttaaa atagaaaacc aaacagtgcc aacagtagtg gcttaattat tggtatacaa
                                                                     1380
gaaaaacaca acaacaatgg gttttcttaa ttacgcattt taaatatcaa tatgtgcatt
                                                                     1440
tgtttttaca gttataaatt tttttctcac ctgttttäga caacagcttg taatagtttt
                                                                     1500
gaatccatta agatgttgct ttcaatttga aatattttgt gtatacatgt atataaaaaa
                                                                     1560
taacccaatg tatgactcat ctgaccgatg tttaagatca ataacggctt atttttcaac
                                                                     1620
atgcagttag gaagagaggg aagcaagcca acctctctac agtatctttt tgctggcttg
                                                                     1680
tttttgtagt ggtatcaata gtggtttttg gagggaacca tgtgccttca gcctatctag
                                                                     1740
tcaagatcag ataccacgat caacaagagc ggtagaagag atggggaaag gggagtgggt
                                                                     1800
aagtgttaaa tatcaatttt gtaaagtgtg cattttgtac teettetagg cacaggatta
                                                                     1860
aaaacaggcc aatgaggaaa aatttgttat aattaggaaa aaactgcaat caaatcaaga
                                                                     1920
cataatagee gaattaagtt ettttaatag attgeatata tagatgttta gecataetet
                                                                     1980
tagatcaact ctttaagagc agaactttat atccaattta catgctctag ataccacctt
                                                                     2040
ttttattttt tacagtaagg tctggtattc aaatacccac ttgtacactg acagctttaa
                                                                     2100
gaaaaacagg acacagaggg agttgtcatt tttagcagca atgaaatacc actaacccct
                                                                     2160
ttttacatac cgaattcaag tcactatcag aggtgagtgc accacaaagt caccaggtac
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                                                                     2280
acatetttt ataaacagca aacattttgc tatttttaat accatagggc taggcaggct
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tgtttcaata tgaaagtgct aattcattta cagattttta taatcagtta tgtagtgcta
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caataaatgt ccaataatct acataggaac aatgatgaaa atgatgaaga ctgaataagg
                                                                     2460
```

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ctatcagatq accttatctt atttacatat aaagaataga tacccaatgg tgaggaagag
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acagaaattg gacaaatact cataggtgta aaaattacat ctacctttga gttttatact
                                                                     2580
gtaaatgaga cattttaaat agtcctgtag cccatgccta ttttttcctc agaaaaagaa
                                                                     2640
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aagctgcctt catgacatcc cctcgtttca gatttccaca gtgtcacttt gaagcttcag
agtcaggatc ttactttctt caaaaaataa agaaaatact cccctcctaa ggtacctccc
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ateccecce acceccaaaa teeegetgat ttetttteea gtgccaggtt gcatgateag
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gtcccatctc ctggggttgt tgtttctttt gtccatctat tgattattag tttagaatag
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cacagcagga aagaaagaga taactcaatt catccctggt gctgggcctc caaaattgaa
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agaacttggc acaactggga gcactgaatt tgtatcctcc atgcttctca atcattttgg
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                                                                     3420
tatcatcttc atcactcccc agttcctcgg tttcatcatc atcttcagct tcatcatcat
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aaaggataaa agetggeaaa atetgteeag aaacetgatt taaacettgg ggtatetgtt
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aacagtcaac atcattaagc cactaataaa atgatttgta actggttcaa cattattagg
                                                                     3660
gaagtgaaga ttttctaagg tatttagtaa taggtatgca ttataatgta aagctgcaat
                                                                     3720
tgcaacttgc agacccatag ttcaaagttc acttgtctta acctctcttg tcagtctttc
                                                                     3780
                                                                     3840
taaggetget teeacgaata agggaatgea etggteaatg ceacgecett tgeactgeag
aatgatgacc totaacaatt ttgotgoatg acactotgoa tottotootg caactootgt
                                                                     3900
aagaacettt ttgcacatac tgtatatcat ttcaagatac ttggtgtcag acagaagtgt
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gtotgtatca actgttacat aattatgaag gaggggcatc atatotgtaa agtaatcaaa
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gccatcttgc tgaaagactt caaatacaag gggtagtagc tgccacatct gtggagacac
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                                                                     4140
                                                                     4200
ctgttgtaaa acagtaccaa tgacctgtaa gcagattccc tcaagctgtt gggttatctc
tttatgatet teaactacae taagaagtgt ateaattgta tteagaatte ceatageagt
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                                                                     4320
cattgccaaa tgttgtgtca tttctactgc aataggagta acttcttcac tatattcaca
                                                                     4380
gatcattttc tgaattacat tggtaaggtc atcattttct gtttctctta taatgtgaag
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gctgatcaat acttgaaggg caatggcagc ttccactttc acaggcattt ctctatcatc
                                                                     4560
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gatettitte ticagaagta titeagetaa agageeaate atatgeaggg etecatetit
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agaaatgaaa tottoaaaca catcaaactt catgogtata tättogtaag ggtottottg
                                                                     4980
ccaaagttcc tcatcagcat ctgtatagca catcaatgga aaaataacat cttggataat
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geettgtata tggggettea gattetteea ggtgagagea tgagaaacte ettgattaat
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ataatttaat gtctgttgta aaactcgagg agccatatat tgcttctcct tgtactgata
                                                                     5160
taacaccttc aataaaactt gctggacacc aacagcaaat gccttcagaa atacttcagc
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                                                                     5280
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                                                                     5340
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                                                                     5400
ccattetgte aggttetgtt ggtttateag ttecagtggt agtgtataet gaacaagage
                                                                     5460
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                                                                     5700
ggcagtccag cggcttggat aatcatgttt gatgatgtga tgaatgcatg tagtaagctg
                                                                     5760
taccetgatg ageteaggag aatggataat ggettetaca atattttete gaatacaatg
                                                                     5820
gcgatettet tetggaatag tataagggga tatateeeet ggtgetgttt etegateagg
                                                                     5880
```

```
ccaatactgt gttatcatat ttttcagata gataacacct gcctgtctca caggtaaatc 5940 cagctgttcc gacatagtaa tctggagcag tgttgagaca aaattcagag acttgtgtgc 6000 ttcattgagc tggcgctccg cggcctcacg cagggctggg tccatggtgc cccgcagggc 6060 ctcgataatg gtgttggggt ccatcgcagc gcggactcgg tcaaacccgg ggctcgggtg 6120 ctactgggcc aggaatagcg ccactcactg cgcacatgga cccgccgcgc tccgcaggg 6180 caaccggcgc gaaaggaaag agcg
```

```
<210> 5581
<211> 5235
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (290)...(2497)
<223> similar to gi5163089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5581 gccgccggaa ctggctgttg gtgggggtgc agcactgagc cgccgacggg gcgggtgggc 60 tttgctgccg agcaggcggc gccgtcttgg ggcctagcgg cgaggcgacc cgcacaggtg 120 ggcggtggcg gtaggtgggt ggccagcgac tggcaacgcg gtggcttaga cgcgcgagat 180 ccggccaggg tcagagtact gtaagattga tgttaaaggc atggtgttca ccccacttca 240 teagegtaca taagttatet ettettttgg accettattt tatgecataa tgcaacaage; 300 tttagaacta gctttggatc gtgcagagta tgtcattgaa agtgcccgac agagacctcc 360 taaaaggaaa tacctatcaa gtggaagaaa atctgtattt caaaaacttt atgacttgta 420 tattgaagaa tgtgaaaaag aacctgaagt taagcagaaa ttaagaagaa atgtgaactt 480 tgttagagaa gettgttatg caagaagaet tttgteatgt ttagtgggte aatetatace 540 ccaggaaatg agggatatto totgatgoto aggggaaaaa acggatcaga ttoogagaco 600 attegaetge cetatgaaga aggagagttg ettgaatatt tggatgeaga agaattacet 660 cctattttgg ttgatctcct agaaaaatct caggttaata tttttcattg cggatgtgtc 720 atagcagaaa tacgtgacta caggcagtcc agtaacatga aatctcctgg ttaccaaagt 780 eggeacatte tettaegtee aacaatgeag aetttaattt gtgatgtaca tteaataaca 840 agtgataacc acaaatggac ccaggaagac aaacttttgc ttgagagcca gctcatccta 900 gctacagetg aaccactetg tettgateet tetatageag teacetgeae tgcaaacaga 960 ctgctctata acaagcaaaa gatgaacact cgcccaatga aacggtgttt caagaggtat 1020 tecagateet etetgaateg geageaagat etatéteatt greeacetee tecteagetg 1080 aggttacttg atttcttaca aaaaagaaag gaaagaaaag caggtcagca ttatgacctc 1140 aaaattteta aggeaggaaa ttgtgtagat atgtggaaac ggagteeetg taatttggee 1200 atacettetg aagtagatgt ggagaaatat getaaagtgg aaaagtetat eaaatetgat 1260 gactcacage caacagtetg gecageccat gatgtaaaag atgattatgt atttgaatgt 1320 gaagetggta etcagtatea gaaaacaaag etgaceatet tgeagteget tggagateea 1380 ctttactatg gtaaaataca gccatgtaaa gcagatgaag aaagtgacag ccagatgtct 1440 ccatcacact cgtccacaga tgatcattca aattggttca ttattggatc aaagaccgat 1500 gctgagaggg tagtcaatca gtaccaagaa ttagtccaga atgaagccaa atgtccggtc 1560 aagatgtcac acagctccag tggctcagcc agtctgagtc aggtttctcc agggaaagaa 1620 acagatcaaa ctgaaaccgt gtcagttcag tcttcggtat tggggaaggg tgtaaaacat 1680 cgacccccac caatcaaact tccctcaagc tcaggaaata gttcctcagg taactatttt 1740 acaccacaac agacaagcag ctttctcaaa tctccaactc ctcctccttc ttctaagcca 1800 tcaagtattc ctcggaaatc atctgtggat ctcaatcaag ttagcatgct ttctccagct 1860

```
1920
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getggaetta aetteateaa tgtagtggge tetgtttgtg gggeecagge tttgatgagt
                                                                    1980
ggttcaaacc ccatgctggg ctgtaacact ggtgccataa ctcctgcagg aataaacctg
                                                                    2040
ageggeette tacceteagg aggtetgeta ceaaatgeac tgeecagtge aatgeaggea
                                                                    2100
getteteaag caggtgttee atttggttta aaaaataett caagteteag geeettaaat
                                                                    2160
ctactccage ttccaggtgg ttcacttatt tttaacacte tgcagcagca gcaacagcag
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eteteccagt ttacaccaca acaacctcag cageccacaa ettgtagtee tcaacageca
                                                                    2280
ggggagcagg gttctgagca aggttcaacc cagtcaagaa caggccttat ctgcctcagc
                                                                    2340
aagetgeetg ttattaacet taetggagta ggaagtttta tgeagteaca ggeagetgea
                                                                    2400
2460
acatcatcat cggcatacag gcagccagtc aaaaagtaaa atgaagagag gcatgccaac
                                                                    2520
cactccaaaa ttttgagtct tgcattactt tttgttcctt ttttaaaaaac acaagagcac
                                                                    2580
                                                                    2640
tgaatcaaaa gaattgagtt tetaettttt gtttttttta atgtgteagt attttacatt
gotagatgta caaactttat acagaaqcac aacettatca tttttaaata aaaacaqqqa
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aatggtttaa caaactaggg ttggtttgcc taagtcattg ctttttaaaa atggtttcac
                                                                    2760
tatacataat atatatggaa gtgacctaag aaataataga aacatctttc agaagaatgt
                                                                    2820
                                                                    2880
agtttgatat ttatttagta taaaacgttt gtgcacagtg ttaacaaata caatttttac
aaatotgtit tgaaaatgtg gtggotgttt atitgggttt catactotta attacttoat
                                                                    2940
ccatcagttt tttaacttet ttgtgtettg taactgeteg geteataeag teetgaagtt
                                                                    3000
tagetecagt tageceaett ceacetggtt tgtgaagaea acagagtttg cettecteat
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ccattactat tgttaaggtt cctgttgcca gatgttcctc ctctccagta gggtcaacta
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taagcaaagt gtcatcaaac acagcaaagg aagttgcaac tggatgagtt ctaatattca
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aataactttt cttctttaaa ttaacttctg ctaaaggogg tttcttcatt tatagtaact
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teaggeaact ggtacatttt ttaaaageeg eetageaaag caaaatgtge aggeateeea
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analytttcc catcgtagtc gaggcanatg agatcacagt atagaaccca gacaagcttt
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cctggagaaa tgcataaggt cctctttctg aattatctgt gaattttcaa tgacatctgc
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cetttateag gggcatetgt tgatggtget gcaaatteet atagtagcaa agaaatgttt
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cctattgaaa gaagctactg aaaaattatg aagacaattt agcaatcagt tatggaaggc
                                                                    3600
                                                                    3660
tetateaaat ateagettag ggaattgtgt eagggeetet aeggaeattg gtgetgatee
teacaatage tetacaagat aagaaggeae tacagtacag tggactacae tacagtgetg
                                                                    3720
                                                                    3780
ctcggcaaga ttacctggag atcttttaaa aaatagtaac tgggtttgtg cccccaacta
ctagccaaga atcttaattt gttctccaga tgatagagca agatttagga actgctgctt
                                                                    3840
tagtggtaaa gagcaaaago tcagctgggc gcggtggctc acaccggtaa tcccaqcact
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ttgggacaca gaggcgggcg gatcacetga ggtcaggagt ttgagaceag eetggccaag
                                                                    3960
atggcaaaac cccgtctcta ctaaaaatac aaaaattagc caggcatggt ggcgggcgcc
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tgtaatccca gctacttggg aggccgaggc aggagaatca cttcaaccca ggagacggaa
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gttgcagtga getgacateg tgccaetgca etccageetg ggcgacagag caagaeteeg
                                                                    4140
teteaaaaaa aaaaaaaage aaatgetetg caattactaa gecagtteaa atgteagage
                                                                    4200
catacttact ggctgagaga cttcaggcaa gttatttaac ctcttacctt aaactcctca
                                                                   . 4260
tettgteaaa tgggaagaaa atagtgteta eteetaggga etgttaataa gggeeaaatg
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agatagacct gttaaatccc aggcataaaa cctgacaagg agcaagttct caaatcttac
                                                                   4380
tgttatacat cactccaggt ttacgaaaga agaatctcaa ctgaggttaa ataacacagg
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caacaatttc aattttctac acatttacac agattacatg tcatcactgg ctaaaaggat
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gggtcatatt atctaacact catagtgaaa gctcttggga aattaaacat taaaaattga
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cacccaacta ccaaatcaag agtagaatta caggtgtata ttacaatcta ataaataaag
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ctaactttgt aactcaaatc tcaataggac atatttagac ttactgcttt aactccacag
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attactgtag tatttcccaa cttcactaaa gcagaaccat ctgcggtact aattgaaccg
                                                                    5100
atgitgacag tigiggitet gaatteacea agitetette catcaggacg geagitetet
                                                                    5160
ttcagaaatc tcctgtaata ctccagaggt tccacggttt tgaacccagc cgccatcttc
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ccgcccgcgc gtctg
                                                                    5235
```

```
<210> 5582
<211> 945
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (828)...(340)
<223> similar to gi6007807 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5582 tttttttttt ttatttacaa aatatatact gaatactata catctggccc catcaccatg 60 gaaacaacto caaagcotgo otggggattt gtgcccaagc ccagcccagg agggctagag 120 aaagcaaagg tgtctaccag ccgccgccat cccagaagga aagcctcttc ccatgagtgc 180 ctgtgggtgg gcggtgagct caacacccac aaagggcaga aggcctgggg gcagtgaggt 240 gatggtgagg gcatgggaag cagatgctgc tgagggtggg tggagggaga aatggagacc 300 cagcacccag caggggagc caggtgacag caggggaagc agatggcagg gccccaggca 360 gtccaggacc ccaggctctg aagggtgggg caagggggtc aggtcacgtc ttgacatcca 420 gcagtggcat ccgcttgtgc tggtagccac tctgccagcc atgtaccacc ttggggtctc 480 ccatgicaga gagcagetee tgeteageet catgeagtte etcagetggg teatagetgt 540 adatggggag daggtgatgg dgdagddggt ddadddtt tttdttctgt adatacatta 600 ccacagccac caccacccg accagggtga tgaggaagaa gggccccaac acatagcca 660 ccatggagtc gctgttggcc tggggggcat tgggcacagt ggtgttactc atgacatcag 720 cageeggagg getgggtggt cageatggge agtggegett egggagggeg eetecaetgg 780 getecetece geogetgeag eccegacagg aacgeeeteg gttggeteec gggeeeegga 840 aaagccgtca ggcgcgtgat caaaggaccc ggggaaatgg gccgggcctc agcacccgga 900 cgcagccaat ccggtagcgg aaagccggtg gcctggagat ttctg 945

```
<210> 5583
<211> 4326
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (84)...(3919)

<223> similar to gi5689551 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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<400> 5583
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ttqacaaaqq tqatqatcqa agacttggca aaaagcctat attcagtagc tcgcagcaaa
                                                                     180
240
aagagtgttg gagttatctc tctactaata aaaagatgaa atctgatgga ttaggagcat
                                                                     300
                                                                     360
ctggacattc gtcaagtacc aatagaaata gtataaataa aactctgaag caagatgatg
                                                                     420
taaaggaaaa agatggtaca aaaatagcat ctaagattac aaaagaacta aaaactgggg
gaaaaaatgt ttctggaaag cccaaaactg taacaaaatc caaaacagaa aatggtgata
                                                                     480
                                                                     540
aggcacggtt ggaaaacatg tcacctagac aagttgtaga aagatcagca acagcagcag
cagcagcaac tggacagaag aatttactaa atggaaaagg agtgagaaat caggaagggc
                                                                     600
                                                                     660
aaatttcagg tgccagaccc aaggtactca caggaaactt aaatgtgcaa gccaaagcaa
ageetttgaa gaaagetaea gggaaggatt caccatgeet cagcategea ggaceeteea
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gcagatccac agattcaagt atggaattct caatttccac tgaatgtctg gatgaaccga
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aagaaaatgg atcaacagaa gaagaaaagc cttctggaca taaactatcc ttttgtgatt
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ctccaggaca gatgatgaaa aacagtgtag atagtgtcaa aaattccact gtagccataa
aatctcgacc tgtttcaaga gttaccaatg gaacttccaa taaaaaaagt attcatgaac
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agaggacaaa gagtacccca tctaatctta ctaaaactca aggatcccaa ggagagtcac
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caaactcagt aaaatcttca gtctcttcaa ggcagtctga tgaaaatgtg gcaaagttgg
                                                                    1200
accacaatac aactacagag aaacaagcac ctaagagaaa aatggtcaag caagtacaca
                                                                    1260
cagctttgcc taaggttaat gcaaaaatag tggcaatgcc taaaaatcta aatcagtcaa
                                                                    1320
agaaaggtga aactttgaat aataaagatt caaaacagaa aatgcctcct ggacaggtta
                                                                    1380
tatcaaaaac tcagcettee teecaaagae etttaaaaca tgaaacatet aetgteeaaa
                                                                    1440
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                                                                    1500
ctcacaaacc tctcattaat cttgcatctg aaataagtga tgcagaagca ctccagtcat
                                                                    1560
cctgcaggcc tggacccaca aaagccatta aacgatcaag aaaaagagaa gttggcgtta
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gaatgccaaa atatttcaaa gctggataaa tcattaaaac acgaactgga atcaaaacag
                                                                    1680
atttgtttag ataaaagtga aacaaaattt cccaatcaca aagaaacaga tgattgcgat
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gcagctaaca tatgttgtca ttctgttggg agtgataatg taaattcaaa attttatagc
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accacagece taaaatacat ggttteaaat eeaaatgaaa acteettgaa etetäateea
                                                                    1860
gtttgtgatt tagactcaac aagtgcaggg caaatccatt tgatatcaga tagggagaac
                                                                    1920
caagtaggga gaaaagatac aaacaaacaa tcaagtatta aatgtgtgga agatgtttca
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ctgtgtaatc ctgaaaggac aaatggtacc ttaaattctg ctcaagaaga caaaaaatcg
                                                                    2040
aaagtteetg tggaaggaet gacaatteet agtaagttgt cagatgaate tgetatggat
                                                                    2100
gaagacaaac atgctacagc agactcagat gtatcttcca agtgtttttc gggacagcta
                                                                    2160
tcagaaaaaa attctcctaa aaatatggaa acatcagaat ctccagagag ccatgaaact
                                                                    2220
ccagaaactc catttgtggg tcactggaat ttgagtactg gtgttctgca tcagcgagag
                                                                    2280
agtectgaat etgacactgg cagtgetace acetectecg atgacataaa geccagatet
                                                                    2340
gaagactatg atgctggagg gtctcaggat gatgatgggt caaatgacag aggtatctct
                                                                    2400
aaatgtggca ctatgctgtg ccatgatttt cttggaagaa gtagcagtga taccagtact
                                                                    2460
cctgaagaat taaaaattta tgatagtaat ttaagaattg aagtaaaaat gaaaaagcaa
                                                                    2520
agtagtaatg atcttttcca agttaattca acgagtgatg atgaaatccc taggaaaagg
                                                                    2580
ccagaaattt ggtctcgatc tgcaatagtt cactctaggg aaagagaaaa tattccacga
                                                                    2640
ggcagtgtcc agtttgctca ggaaatagat caggtatctt cttcagcaga tgaaacagaa
                                                                    2700
gatgaaagat ctgaagctga aaacgttgca gaaaatttct ctatatctaa cccagctcct
                                                                    2760
cagcagtttc agggaataat taatttagct tttgaagatg caactgaaaa tgaatgtcgt
                                                                    2820
gaattttctg caaataaaaa gtttaaaagg tcagttttac tttcagtcga tgaatgtgaa
                                                                    2880
gagetággat cagatgaagg agaagteeat acteeettte aggettetgt agattetttt
                                                                    2940
teacettetg atgtttttga tggcatttet catgaacate atggaaggae etgetattee
                                                                    3000
agatteteae gagaaagtga agataatatt ttagaatgta aacaaaataa aggcaatagt
                                                                    3060
gtatgtaaaa atgaaagcac tgtcttggat cttagtagca ttgactcttc aagaaaaaat
                                                                    3120
aaacagagtg tttcagccac agaaaaaaag aacacaatag acgtcctatc cagtagaagc
                                                                    3180
agacagette ttegagaaga taaaaaagta aacaatggaa gcaatgtgga aaatgacatt
                                                                    3240
cagcaacgca gcaaattctt ggatagtgat gtaaaatctc aagaaagacc atgtcacttg
                                                                    3300
gatetteate aaagagaace caattetgae ataccaaaga acagetetae aaaateteta
                                                                    3360
gacteettte ggagteaagt tetgeeteag gaaggteeag tgaaagagag ceattetaca
                                                                    3420
actactgaaa aagctaatat tgctttatct gcaggagaca tagatgattg tgacacactg
                                                                    3480
```

```
gcacaaaccc gcatgtatqa ccatcggcct tcaaaaaccc tgtctccaat atatgagatg
                                                                     3540
gatgtaatag aagcatttga gcagaaagtg gaatcagaaa cacatgttac agatatggat
                                                                     3600
ttttaagatg accaacattt tgcaaaacaa gattggacac tactaaagca actgctctct
                                                                     3660
gaacaggatt caaacttaga tgttacaaat tccgttcctg aagacttaag tttagcacag
                                                                     3720
tatctaatca atcagacact acttttagca cgagatagct caaaacctca gggtataaca
                                                                     3780
catattgaca ctttgaacag atggagtgaa ctaacatctc cacttgattc ctcagcgagc
                                                                     3840
atcaccatgg ctagtttttc ctctgaagat tgttcgcctc aaggcgagtg gacaattctg
                                                                     3900
gaactggaaa ctcagcatta agtgttaaca ttttggaaaa atttatgcca ctcctttatt
                                                                     3960
ttttgatgcc tatattatat ccaaatgata attgcattag ccggatataa actttcttta
                                                                     4020
atattgagtc tttccaattt aatgaggtaa acatagttta tttattaata tatcacatat
                                                                     4080
agaaaaatgt ttttctaaag tttttgagca tgttttctct \aattattaga gaaattagaa
                                                                     4140
gacttataag gaaaccctag cttcagtttt cctttcctag ctgatgattt gttcacttaa
                                                                     4200
tcattattca agaatttaaa atgtgaatgc agaagtagat cagtcccttt actttttgct
                                                                     4260
ctgcataggg taacatagta atttaacaat aaaaacttac cgtgcttgtg tccattaaaa
                                                                     4320
                                                                     4326
```

```
<210> 5584
<211> 6329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (6330)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (124) ... (5558)
<222> similar to gil665781 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5584
geggeegeeg geeteetagg agegetgeac etggtgatga eeetegtagt ggetgeggeg
                                                                       60
cgggccgaga aggaagcatt cgttcagtca gagagcataa tagaagtact gcgttttgat
                                                                      120
gatggagggc tactacagac cgagacaaca cttggactca gttcatatca gcagaaaagt
                                                                      180
atatetetet acegggggaa ttgeaggeee atacgatttg ageeaceaat getggattte
                                                                      240
catgaacaac cagttggaat gccaaaaatg gaaaaagtct acttacataa tcctagttct
                                                                      300
gaataaacga ttactttagt atcaatattt gctacaacat cacattttca tgcatcattt
                                                                      360
tttcaaaata ggaaaattct tccaggagga aatacatcat ttgatgtaag tttttccttg
                                                                      420
caagagtagt aggaaatgta gaaaatactt tatttattaa tacatctaat catggggtat
                                                                      480
ttacttaccc aggtatttgg tgttggagtt ccaaatccat atcgattgag gccgttcctt
                                                                      540
ggggccagag tcactgtgaa tagcagtttc tcacctataa taaacatcca caatcctcac
                                                                      600
agtgagcctt tacaggttgt agaaatgtac tctagtggag gagaccttca cctagaactc
                                                                      660
ccaacgggtc aacaaggagg taccagaaaa ctgtgggaaa ttcctcctta tgaaaccaag
                                                                      720
ggagtgatga gagccagttt ttcatctaga gaagcagata atcacacagc cttcataaqa
                                                                      780
ataaagacta atgcttcaga cagcacagag tttatcattc ttcctgttga ggttgaagtt
                                                                      840
acaacagctc ctggaattta ttcctcaact gaaatgttag attttggtac actaagaaca
                                                                      900
caagatctac caaaagtttt aaaccttcat ttattaaatt caggaacaaa agatgtacca
                                                                      960
ataacaagtg ttcgacctac accacaaaaa tgatgctata acggtacact ttaaaccaat
                                                                     1020
```

```
tacattaaaa qcatcaqqaa aqtaaataca ccaaggttgc aagcattagt tttgatgcat
                                                                     1080
cgaaggcaaa aaagccatct cagttttctg ggaaaataac agttaaagca aaggaaaaga
                                                                     1140
                                                                     1200
gttattctaa acttgaaata ccatatcaag cagaagtttt agatggttat ttgggatttg
atcatgctgc aacattattt cacatccgag acagccctgc tgatcctgtg gaaaggccaa
                                                                     1260
tttaccttac taacactttc agttttgcga tcctcattca cgatgtgttg ctaccagaag
                                                                     1320
aagccaaaac aatgtttaaa gttcacaact tcagcaaacc agtcttaatt cttcctaatg
                                                                     1380
aatcaggata catttttacc ctgcttttta tgccttccac atcatccatg cacattgata
                                                                     1440
acaacatttt acttattacc aatgetteta aattteattt accegtgegg gtatacacag
                                                                     1500
getttttaga ttaetttgta ttgeececca aaatagagga aegttteata gattttggag
                                                                     1560
tactgagtgc tacagaagca agtaatattt tatttgcaat tataaacagc aatccaattg
                                                                     1620
agttggctat aaaaagttgg catatcatag gagacggttg tatcaataga acttgtagct
                                                                     1680
gtggacagag gcaatagaac tacaataatt tcaagcctgc cagagtgtga aaaatcctct
                                                                     1740
teateagate aateateggt aacattaget teaggetatt titgeagtet teagagteaa
                                                                     1800
acttactgca aaaaaattag gaggggattc atgatggagc catccagatc acaacagact
                                                                     1860
atgagatect gacaatecet gtgaaagget gtgattgeag taggeteaet gacetgetee
                                                                     1920
cctaagcacg tggttcttcc accttccttt ccagggaaaa tagttcatca aagtttaaat
                                                                     1980
attatgaatt cetteteaca gaaggtaaaa atacagcaaa tacgatettt gteagaagat
                                                                     2040
gtgcgatttt actataaacg attacggggc aataaggaag acttggagcc aggaaaaaaa
                                                                     2100
tcaaagattg caaacattta ttttgatcct ggactacagt gtggggatca ttgctatgtt
                                                                     2160
ggettgeett ttetateeaa atetgaacee aaagtgeage etggtgtage eatgeaggaa
                                                                     2220
gatatgtggg atgctgactg ggatttgcat caaagcctgt tcaagggatg gacaggaata
                                                                     2280
aaggaaaatt caggtcatag attgagtgct atatttgaag taaatacaga ccttcaaaaa
                                                                     2340
aatataatat caaaaatcac tgctgagctc tcctggcctt ccatacttag ctcaccccgg
                                                                     2400
cacttgaaat ttccacttac taatacaaac tgctcctcag gaagaagaga ttactttaga
                                                                     2460
aaateettge aggatgitee tgtetatgit cagtitatie etetggetit atatteeaae
                                                                     2520
ccttcagtgt ttgtagataa gttagtatca aggtttaact tgagtaaggt ggcaaagata
                                                                     2580
gatttgagaa cactagaatt tcaagtcttc agaaacagtg ctcatccact gcagagttca
                                                                     2640
acaggattta tggagggccc tctctccaca tttaatttta aacctaattt taaaacctgg
                                                                     2700
agaaaagaaa tetgteaaag taaaagttta eteeagttea caacagaact gtttetteae
                                                                     2760
ttatcatagt cagaaataac ctgactgtga tggatgctgt gatggtccaa ggacaaggaa
                                                                     2820
caactgagaa cttgagggtg gcaggcaagc ttccaggtcc aggaagctcc ttacgcttta
                                                                     2880
aaatcacgga agcattgtta aaagattgta cagatagttt aaaactaaga gaaccaaatt
                                                                     2940
tcacattgaa aagaacattt aaggtagaga atacaggaca acttcaaatt cacatagaaa
                                                                     3000
ccattgaaat cagtggatac tcatgtgaag gatatggctt taaagttgtt aattgtcaag
                                                                     3060
agtttactet aagtgeeaat gettetagag atataateat attgtttact eetgatttta
                                                                     3120
cagettetag ağttattegg gaactgaagt ttataacaac cagtggetet gagtttgtat
                                                                     3180
ttatattgaa tgcatccctt ccttaccata tgttagcaac ctgtgcagaa gccctaccca
                                                                     3240
gacctaactg ggaactggct ctgtatatca tcatctcagg aataatgagt gcactgtttc
                                                                     3300
ttttggtcat tggaacagcc ctatttggaa gctcaaggaa tatgggagcc catttcgaag
                                                                     3360
geggetatee etttgaggee tegaaceege cettegatgt gggaaggeea titgatetea
                                                                     3420
ggagaategt tggtatttca tetgaaggaa aettgaacae aeteagetgt gaeeeeggte
                                                                     3480
acagtagggg gttctgtgga gcaggcggat catcatcccg acccagtgcc gggagtcata
                                                                     3540
agcagtgagg cccatcgggt cacccacaca gcagccacag caatagaaac tcagctgacg
                                                                     3600
tggatgacgt cagagcctat aacagtggac gaacctctag catgacttct gctcaagcag
                                                                     3660
cttcttcaca gcctgctaac aaaacacgcc cccttgtctt agattccaac acaggggctc
                                                                     3720
aaggtcattc tgcgggcaga aagtccaaag gggcaaagca gagccagcac ggcagccagc
                                                                     3780
accatgeeca cagecegetg gageageace eteageetee tetgecaceg ceagtgeete
                                                                     3840
agccccagga gccgcagcct gaaaggctgt ctcccgcccc cctcgcacac ccttcccacc
                                                                     3900
cagaacgtgc cagcagcgcg aggcacagtt ccgaggactc ggacatcacc agtctcatag
                                                                     3960
aagccatgga caaagacttc gaccaccatg actccccagc cctagaagtg tttacagagc
                                                                     4020
agcetecate gecattgeea aaaageaaag ggaaaggaaa acetetteag egeaaggtga
                                                                     4080
aaccacctaa gaagcaagag gaaaaggaga agaagggaaa gggaaagcca caggaagatg
                                                                     4140
agctgaagga ctctttggct gatgatgata gctcctccac caccacagag acctccaacc
                                                                     4200
ctgacacaga accgctcctc aaggaggata cagaaaagca aaagggaaaa caagccatgc
                                                                     4260
ctgaaaaaca tgaaagtgaa atgtctcaag tgaagcaaaa aagcaaaaaa ctcttaaata
                                                                     4320
ttaagaaaga aatcccaaca gatgtgaaac ccagttcatt agaactacca tatactcccc
                                                                     4380
ctttggaaag taagcaacgt agaaatctcc caagcaagat tcctcttcca actgcaatga
                                                                     4440
```

```
4500
caagtggatc caaatcacga aatgcccaga aaacaaaagg tacaagtaag ttagtggata
acagaccaco tgocotagoa aaattootoo ogaatagtoa agaattaggo aacaccagta
                                                                     4560
gctcagaggg tgaaaaagac tctcctccac cggagtggga ttccgttcca gttcacaaac
                                                                     4620
                                                                     4680
ctggcagete tactgatagt etttataaae tttetetgea aaceeteaae geagacattt
tettaaaaca aegecagace teacegacae etgetteece gteteecea getgeeceet
                                                                     4740
                                                                     4800
geceettigt ggeeegggge agetacagea geategteaa cageagetee ageagtgace
ctaaaataaa acagccaaat ggaagcaaac acaagttgac aaaggcagcc tcgctcccgg
                                                                     4860
gcaagaacgg caaccccact tttgctgcag tcacggctgg ctacgacaag agcccaggtg
                                                                     4920
                                                                     4980
ggaatggctt tgctaaagtt tcttcaaaca aaacaggttt ctccagcagc cttggcattt
cacacgetee tgttgacage gatggeteag acageteggg tttgtggagt ceegteagea
                                                                     5040
acccaagcag ccctgacttc actcccctca attcgttctc cgcctttgga aactctttta
                                                                     5100
atctaactgg tgaagttttc agcaaactcg gattatctcg atcgtgcaat caggcctcac
                                                                     5160
agaggagetg gaacgagttt aatagtggcc cttcatacct ttgggagtcg ccagcgacag
                                                                     5220
atoccagtoc ttootggcca gocagttoog gotoccogac ccacacagec acateggtoc
                                                                     5280
teggtaacae cageggeetg tggteeacea etecatteag cageteeatt tggteeagea
                                                                     5340
                                                                     5400
accttageag egecettece tteaceacte cageaaacae getggeaage ateggeetea
tgggcacaga aaactcccct gctcctcacg ctccctccac ctccagtcca gctgacgact
                                                                     5460
tgggacagac ctacaacccg tggcggatat ggagccccac gattggaaga agaagctcgg
                                                                     5520
accettggte taattegeae ttteeteaeg agaattaaat taageaaaaa acaaacaaae
                                                                     5580
atagtgggcc ctcgtctaga tcatgatgtg ccagtttctg agacatcttt ttaaggctct
                                                                     5640
tactgcagct cccctccca ccctcctctt ctttqcaaaa cagacccaag caggcaggc
                                                                     5700
teagaceact egettettte agatetttet tgeaattatg ataacatgag atttgetgtt
                                                                     5760
gtgcttttag agaaaagtct ggactcagcc acaaactcta ataagacctg tacatctgag
                                                                     5820
aacctttccc gttactgcgt tttcaccacc tgtcttcccc atgctttatt tatctgtatg
                                                                     5880
aacacagatt tgacattaca gctaaggaaa taatttgagt tgattcagaa atcctggcat
                                                                     5940
gtgacaattt tgttaaatta ccaagtttgg tttttaataa tttctcaata ttatgcgcca
                                                                     6000
agatctaatt ttaaaactgt atgaggactt tgtgctgaaa atagagtatt tttttaaagt
                                                                     6060
aaggetgtet tggtttaaaa geagattaea gaaatgtaag teaaettaag aacagtgaat
                                                                     6120
gaatgtaaaa acattcagtt gagaccatat gcattttctg tgctgtttgt acttgaggta
                                                                     6180
tgtaacattt gtatacctga acttatttta aagatgaact gaaatgcaca tagccaagtc
                                                                     6240
ttgagataca agattgaatg tgtatttctt aaaaatacaa ctttgtgttg tactttgaaa
                                                                     6300
taaatgatgc ttttttcana aaaaaaaaa
                                                                     6329
```

```
<210> 5585
<211> 1991
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (358)...(1133)
<223> similar to gi2911882 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5585
tccgggtttc tcatattggt caggctggtc ttgaactcct gacctcaggt gatctgcca 60
cctcggcctc ccaaagtgtt gggattacag gcgtgagcta ccgcgcccgg cagggttgtt 120
tcttaaaggt aaataagctc cctaaatttg tctgtaaatt ggaagtaact ccagtgaaaa 180
tgccaacagg aattttttt tggcttgaca aactaaggct aaaattaata tagaaatgag 240
catacaataa taggaacact atgaaaaaga agagtaatga gaggtgggac caagtctata 300
```

```
agatattaaa gggtaagtet eteeggeeeg gttteeeteg gtgtgetaet gtgegegega
                                                                      360
tecageacea tggggaageg ggacaategg gtggeetata tgaacecaat ageaatggeg
                                                                      420
agatcaaggg gtccaatcca gtcttcaggg ccaacaatac aggattatct gaatcgacca
                                                                      480
aggcctacct gggaagaagt aaaagagcaa ctagaaaagg aaaagaaagg ctccaaggct
                                                                      540
ttggctgaat ttgaagaaaa aatgaatgag aactggaaga aagaactgga aaaacacaga
                                                                      600
gagaaattgt taagtggaag tgagagctca tccaaaaaaa gacagagaaa gaaaaaagaa
                                                                      660
aagaagaaat cttggtaggt attcatcttc ttctttcatc aagctctgat tcttccagca
                                                                      720
gttcttctga ttctgaagat gaggataaga aacaaggaaa acggagaaag aaaaagaaga
                                                                      780
accettcaca taaatettet gaaageteea teteagaaae tegaateagae agtaagegata
                                                                      840
gtttaaaaaa gaaaaagaag tcaaaagatg gaactgagaa agaaaaggat attaaaggac
                                                                      900
tcagcaaaaa gagaaagatg tattctgaag ataaaccttt atcatctgag tccttgtcag
                                                                      960
                                                                     1020
aatcagagta tattgaggag gtgcgagcaa aaaagaagaa aagcagtgaa gaacgagaaa
aagcaacaga aaaaacaaaa aagaaaaaga agcataagaa acacagtaag aagaagaaaa
                                                                     1080
agaaggetge tagtteaagt eetgaeteae eataaeatta agaaaaatea ggatteeett
                                                                     1140
ataaagaaag tgcaatgtct gaggaaattt caactgtgaa aactacaaca tatttactaa
                                                                     1200
aatgcatgaa tittetigit titiggaatta tieetggaet atteagtage caeteagatg
                                                                     1260
ccactgtgtg aaagggccat aaatgttgcc tgctgcttga acatctattt ttttctcttc
                                                                     1320
cagtgcttga taactctggg agataataca ctgcagtcgt actagtggtt aagatatttg
                                                                     1380
ggaataaaat taatactttt gactagaagc gtctaaggat aaaccaacag aaattgaatc
                                                                     1440
tggatacatc tttaagatgt aatcagaaat gaccagatga ctctagttag aatttttgaa
                                                                     1500
ggagggatta cattaatatt tcaaaaccct tactctgtag ataagtgtat tttaattttt
                                                                     1560
teeeetegta taettttatt taeetgggga aggagetttt agggttgggg ggtggtttge
                                                                     1620
tatetettta getageagaa tagtgtgeet ttgateetea eacateetgt attatggaea
                                                                     1680
cagtagecat getteacggg gaggteagag etggetacca geagtettge cetttactga
                                                                     1740
gettagtgte atetttggat getgteatat getgetttga gtgaaccaga gaaacageca-
                                                                     1800
tttgcagcat gagaaagccc caaaagctct gggatttacc tccactttag taataatgaa
                                                                     1860
tattttttag cattagaatg tgttatgtca tttgaattaa ttttgactac actttggctt
                                                                     1920
gggagaggaa ttattttaaa tagacattgg tactttttga acttgatagc taaagattct
                                                                     1980
aaaatgcatg t
                                                                     1991
```

```
<210> 5586
<211> 1029
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (154)...(967)
<223> similar to gi34203 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5586
ggaattegtg etggggggtt geagaaaget getegeeage ttagtteagg eaggtgetgt
                                                                      60
cagcgtccct tgttttggag gagccagcct gagccctacc cccgacgaag cgagtggagg
                                                                      120
cggcggttta actgacgttt tctttctgcc cagccgaaag gaaagaaggc caagggaaag
                                                                     180
aaggtggctc cggccccagc tgtcgtgaag aagcaggagg ctaagaaagt ggtgaatccc
                                                                     240
ctgtttgaga aaaggcctaa gaattttggc attggacagg acatccagcc caaaagagac
                                                                     300
etcacceget ttgtgaaatg geceegetat atcaggttge ageggeagag agecateete
                                                                     360
tataagegge tgaaagtgee teetgegatt aaccagttea eecaggeeet ggacegeeaa
                                                                     420
acagetacte agetgettaa getggeecae aagtacagae cagagacaaa geaagagaag
                                                                      480
```

```
aagcagagac tgttggcccg ggccgagaag aaggctgctg gcaaagggga cgtcccaacg
                                                                      540
aagagaccac ctgtccttcg agcaggagtt aacaccgtca ccaccttggt ggagaacaag
                                                                      600
aaageteage tggtggtgat tgcacacgac gtggateeca tegagetggt tgtettettg
                                                                      660
cctggccctq tgtcgtaaaa tggggggtcc ccttacttgc attatcaagg gaaaagggca
                                                                      720
agactgggga cgtctagtcc acaggaagac ctgcaccact ggtcgccttt cacacaggtg
                                                                      780
aaactcggaa gacaaaaggc gcttttgctt aagctggtgg aagctatcag gaccaattac
                                                                      840
aatgacagat acagatacga tgagatccac tgtcactggg gcagcaacgt cctgggtcct
                                                                      900
aagtccgtgg ctcgtatcgc caagctcgaa aaggcaaagg ctaaagaact tgccactaaa
                                                                      960
ctgggttaaa tgtacactgt tgagttttct gtacataaaa ataattgaaa taatacaaat
                                                                     1020
tttccttca
                                                                     1029
```

```
<210> 5587
<211> 341
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(123)
<223> similar to gi28547 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5587
ggcacgagcc caccatggcg ctgtgtcctg ccgacaagac caacgtcgta ggccgactgg 60
ggtaaggtag ttgcgcacgc tggcgaggat ggtgcggagg ccctggacag gatgttactg 120
ctcttcccca acaccaggac ctacttcccg cacttcgacc tgagtcacgg ctctgcccag ggtaagggtc acggatggaa tgagggcgac gcgctgacca acgccgtgtt gcacgaggac 240
tacgtgccca acgcgctgta cgacctgagc gacctgcact cgcatcatgc ttcaggagga 300
ccaggacatc ttcaagcgac tactgcactg actgctggcg a 341
```

```
<211> 1911
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1609)...(641)
<223> similar to gi5225320 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5588

```
<400> 5588
ctttttttt ttgttagttg tttttgttt taatttgtct ccaataagca atgtcttctg 60
```

```
ccccatccag catgggaagt gggtcccacg tgaagggggc cccaccaccc cactttggga
                                                                      120
agetgaagge tagagaette gggageeeee eeeggeteaa gaeteeeee taegetgggt
                                                                      180
tgtgggttat attcagaggc ccgacaccca cactggggta ggttaggtat tgggtttact
                                                                      240
taggccacag gccccccggg ggcagggaga cagagtgggg ggcccgaagc tccctgtctc
                                                                      300
tggaagaagt taaaaagttc ttggggtagg ccctgggccc cgtggggggc agttatgaga
                                                                      360
tgaagggagg ttactcctta agcccaggag tggttaagag acagtggggc tggtagagat
                                                                      420
gcctgtttaa agccttggcc tctaggaggt gttagagatt tgctggggtt gggggcccag
                                                                      480
ggttgctggg acccccagtt tttggggaag ggagctgtaa gagattgggg gatgttctga
                                                                      540
gctccccaga caagaactgc tggttaagag ggggccaggc ccggttgggg ctcagctgtc
                                                                      600
cctgaggagc tcggcatccc gcctgggaga tgcagctgtc actggggttt ctccctctct
                                                                      660
gttgtcctgg cctcgtcctt ggcaggtggc ggggacttct tgggggaagc tgaagtgctg
                                                                      720
gggttgggga cccccgccc cgactgggca tctatgctgg cgtgcctcct tgcggacaag
                                                                      780
gteeteeage teettettee ateeaaggag eteageaagg geeaggeage eetggtegea
                                                                      840
ttcacccage caggecacgt ccctgcaagg aggtacccat gaccaggagg aggtccacct
                                                                      900
tcaggaagtc tgactgcata caggagaaga aacgcgctgg gaggctctca ccaaaaaaga
                                                                      960
cgattatcag gcttcaccag gctctgacag tcttcacact tgggcgtcac ctcagagaag
                                                                     1020
atcttetett teatecaget tagegggtat tegtgeegge agetggeget gaegeagtgt
                                                                     1080
gatgtgtaga aggtgccgtg cgcctccaac aaagtcctcc tgttccagcc cggctattcg
                                                                     1140
ctccagggta tctatgttcc tgcgtgtagc agcgcaggag tagccccttg tccttcagca
                                                                     1200
ggcgcatgaa gtagtgacag atggttggct-tgaactgccc caggatagag ttccttggcg
                                                                     1260
agggcgaaga agggttccgg atgtttcttg aaatagctga atctcaaaag atggcctctg
                                                                     1320
ggttagggaa agatggtcac ttctctaggt tgttcaataa gaggccggtg gatggagaag
                                                                     1380
cgaaaagtcg gggatgcctg cggatgtgga gattccagct cccaccaaac agatgactct
                                                                     1440
gegacagegt tegetetgea tgtaceggge cacceettee aaggteaget egtecageag
                                                                     1500
acgetectte tggetgecca ggetgagegt etgggagaat aagtteegea ggaagteeat
                                                                     1560
gtotgottot ccaccagogg etcotcoctc agagtotgaa totgagtoot ggaaggggtg
                                                                     1620
gggtggagtg gccaggcccg agaggtggga ttagggaggg aggagagggg gtgataccag
                                                                     1680
gtttggggaa aaggctgtgg caggaaggtg gcctgaggaa gtgcggggtg gtggagagac
                                                                     1740
tgcactgggg ctagctccag ggctctggga caggctgccg gggttggagt cctggccatg
                                                                     1800
cccgtcccca ggagcaagac ctcatgtgag tggctttgct ttgcttttct tttttgagac
                                                                     1860
agtgtctcgc tctgttgccc aggctggagt gcactggtgc agtcacagct t
                                                                     1911
```

```
<210> 5589
<211> 1612
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1613)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (109)...(1060)
<223> similar to gi4929649 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5589
aggaggcggg cgggcgggt tctttccgga aggattgaat ctcctttagc cccgccgcc

```
teegtaqetq cetgaagtaq tqeagggtea geeegcaagt tgeaggteat ggegetgget
                                                                      120
getegactgt ggegeettet geettteega egtggageeg eeeeggggte tegteteeet.
                                                                      180
geggggaett egggeageeg egggeattge ggeecetgte gatteegegg ettegaggta
                                                                      240
atgggaaacc caggaacttt caacagaggc cttttactct cagctttgtc gtatttgggt
                                                                      300
tttgaaactt accaggttat ctctcaggct gctgtggttc atgccacagc caaagttgaa
                                                                      360
gaaatacttg aacaagcaga ctacctgtat gaaagcggag aaacagaaaa actttatcag
                                                                      420
ttgctaaccc aatacaagga aagtgaagat gcagagttac tgtggcgttt ggcacgggca
                                                                      480
tcacgtgatg tagctcagct tagcagaacc tcagaagagg agaaaaagct attggtgtat
                                                                      540
gaagccctag agtatgcaaa aagagcacta gaaaaatgaa tcaagttttg catctcataa
                                                                      600
gtggtatgca atctgcctta gtgatgttgg agattatgaa ggcatcaagg ctaaaattgc
                                                                      660
aaatgcatat atcatcaagg agcattttga gaaagcaatt gaactgaacc ctaaagatgc
                                                                      720
tacttcaatt caccttatgg gtatttggtg ctatacattt gccgaaatgc cttggtatca
                                                                      780
aagaagaatt geetaaaatg eetgtttgea aeteeeteee tagtteeeae eetatgagaa
                                                                      840 -
ggccttaggc taactttcac agggcagaac aagtggatcc aaacttctac agcaaaaact
                                                                      900
tacttetttt aggaaagaca tacttgaaac tacacaacaa aaagettget getttetgge
                                                                      960
taatgaaagc caaggactat ccagcacaca cagaggagga taaacagata cagacagaag
                                                                     1020
ctgctcagtt gcttacaagt ttcagtgaga agaattgaga acttttcaga gaagatttat
                                                                     1080
gaaatagcta ataaacattg cettttettt taattetaaa ettaatatat gaactataae
                                                                     1140
tgttctacgg ctttttaaat gttgtgacca tttaaccgtg taaatataaa atattctagg
                                                                     1200
cttcttcaca aataataggg taaaataaat aatcgccata agagtggtag aaataaatct
                                                                     1260
ccatggctca ggcaaagaga ttattttgca tcctggatac cagcaatgca aaatggtatg
                                                                     1320
agatttctaa ggattgatca cattgggatg ggagatcaag caaagaaata tttgtagagg
                                                                     1380
aggggaaatg gatctatagg ggatatacag ggggatggat tttcaaattg gattgattct
                                                                     1440
aagttgaaat ettgaagaga aggtgtggtg acagtggtta ggatgttgtg ggtteetgae
                                                                     1500
ataaagtagt taaatgatat atcttggagc taacctgtga aataaaaaac taagtaagga
                                                                     1560
gatgatgtat tgcgnccgct ctagagtatt caacctaaca aagagtgact tt
                                                                     1612
```

```
<210> 5590
<211> 2065
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2038)...(179)
<223> similar to gi535012 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5590
tttttcagag acaaggettt tattcaetgt atgeettgge ateteetete acaccagaaa
                                                                       60
gtttaaaaga aaaaacacag cgacaaggat tcacttgggc cattttggaa cccatttata
                                                                      120
ttgtgggtgt tactctgggc ttcatctagc cccatactag cctctgagac tgcctcagac
                                                                      180
cgtctgaaca ttcatggcct tcccttgggc ccaaatgtag ctgtcccagt gtaaaaggag
                                                                      240
tcatagtotg gagtgtaaga cocagggato ttacaaaaag cotcottggt cottaggoto
                                                                      300
tgggtagtag gaaaaccagg ttgtgtttgt acccctagtc aaaaactttg atggcaattc
                                                                      360
tcaaaaacac gtttcggatg ggtgctgagt ggtggggtag agtctcccct gggacagatg 🕐
                                                                      420
ctgctcagag acttcctggg gcaatttggc tctgctgtca gggaggaaga tctcatctgg
                                                                      480
ggatgtgccc gggatccccg ccgggcgaat ggactcccag ttgccacccc cggggaacac
                                                                      540
gttaagcatt gtttcccctg ccccaggaa tgaaggtctt gcccatctcc caaatcaaca
                                                                      600
etecttaaaa aggaetteea aetggeaaaa aateeeeteg geeeeteggt gaeeeggtag
                                                                      660
```

```
cactteteaa geegtgeact eggeettget ggtggggttg eteagggeaa agatgatagg
                                                                      720
                                                                      780
ggcgctcgtg gaaggaggcc atgtccctca gaatctgctc cgtgaagggc ttctgcgatg
geageaacae etatgatgge tgtgggette accageetea ecaceteete cagggagttg
                                                                      840
actteaggat gggtettggg caaacatete etttteatgg tteaggtggt eteteecetg
                                                                      900
aacaatgage cetttaaaag tecaceatee cagatettte ttgtggeete etgeettegg
                                                                      960
tacaccttct ttcctctagg gccatgacaa ggaggtgggc aatgccccat agctgcctcg
                                                                     1020
cotgoacctt ggaaaccaaa cacgtgattg gaaagcttgt tottggtgat togcagagca
                                                                     1080
                                                                     1140
gccaagatcc ctgccacagc aacggaggct gtgccttgga tgtcatcatt gaacatgcag
                                                                     1200
tactigttac ggtattigtt gagcaggcgg aaggcattgg cattggcgaa gtcttcaaat
                                                                     1260
tggatgaggc aatttattcc aaacttgtct gtcacagcct gcatgaactc atccagcaag
teategtatg cettecegtg caegegetgg tgttteagge egatgtacag agggtetetg
                                                                     1320
agcageteet cattigtiggt geegaegtee agcageacag ggaggeactg etgegggtte
                                                                     1380
accecteege atgeegtgta cagggeeage ttgeecacag ggatgeecat geegtageag
                                                                     1440
cccaggtete ccaggeccag gatgegetee ccateagtea ccaccaegge ettaatattg
                                                                     1500
tettetggee aagaatteag cattgttgea agatgaeett tgteatgaat ggtgatgaae
                                                                     1560
agtocacggg gcctgcggaa agtcaggcca tagtgctgac aggctagccc cacggtaggc
                                                                     1620
gtgtacacga ttggcatgaa cttctccacg tccgaagtca gcactcggta gaagagcttc
                                                                     1680
tegttaeggt ettggagtgt catgagaatg atgtaettgt ceaggteact etgetgeege
                                                                     1740
tegtaatate teatgatteg gaggagetgg aegteetgge teagaaagea gggegggatt
                                                                     1800
aggeegtgga ttecaagetg cageetttet teaagggtaa aggeeateee ettgttgaga
                                                                     1860
tgagggttee tggtgaeate gtateegege ttetteaggg geaeagggeg egeegggeea
                                                                     1920
ggettggagt ggeageettg ggegggegeg gtgggtgtee agegegggag ggegeegeag
                                                                     1980
georggeorg georggage cagegegtg cotgteecca gegeggeace catggteett
                                                                     2040
ggcagacete ggteetetee tteeg
                                                                     2065
```

```
<210> 5591
<211> 1126
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (194)...(916)
<223> similar to gi2477514 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5591
ggcacgagcc acggtccagg ctggacacaa ccaaaggcgg aggacccgtg gcccacgaag
                                                                       60
ctcatctttg aactgiccoc goottotoco goottgactt gigaccciag goodttiggg
                                                                      120
gegeetetga eccagetage cagatecegg acceaaacea tgttecetgt gaaggtgaaa
                                                                      180
gtggagaaat cagagctgga gatggccaaa gcccggaacc aactggatgc tgtcttgcag
                                                                      240
tgtctgctgg agaagagtca catggacagg gagcgtctgg atgaggaagc tgggaaaca
                                                                      300
ccctcagaca cccacaataa ggactgetee ategcageea etggcaaaag gecatetgee
                                                                      360
cgcttccccc accagcggag gaagaagagg agggagatgg atgatgggct ggctgaggga
                                                                      420
gggccgcagc gatccaacac atatgtgatc aagctgttcg accggagcgt ggacttggcc
                                                                      480
cagttcagcg agaacacgcc actgtaccca atctgccgcg cctggatgcg caacagcccc
                                                                      540
tetgtgegeg agegtgaatg eteteceage teacecetge eeeegetgee tgaggatgag
                                                                      600
gagggettea gaggtaacea acageaagag tegttgatgt gtacaagett gecegeeaae
                                                                      660
ecacacecce gggggccaac egaagaatge etgcagatte eegcatecca tetecaettg
                                                                      720
cageettgag gatgeaggge acceettgae ggtggageee ttttgageee gageeeteae
                                                                      780
```

```
cctccacactcatctategeaacatgcagegctggaaacgcatccgccagaggtggaaggaggcctctcatcggaaccagcttcgttactcagaaagcatgaagatcctacgagagatgtacgaacgacagtgatgttcccaggtcccccacaccagtaaacatccccagctccaaaaaaaaaaaaagggggggcccttttaaggggaccaattttattcccgggggttgggaaggtaaaatttttttttggggccccaaaattaaattccggggcggtttttaaaacgggggggggggaaaaaccccaatttaatcctttgggaaaaa1126
```

```
<210> 5592
<211> 1964
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1741)...(1871)
<223> similar to gi5921397 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5592 teatgggaag cetatttgca ggaattggtt etgaettgga gaaaaaaaac acaacttett 60 120 gaaaaggtaa aatagettaa ageatttaat atetaaacaa ateaatetgt taatagtagt 180 cacaaaatat gottaatata gaaacccaca ttoatgtttt taagaaaaaa gtgtaaattg 240 tattecacet caaaacataa attaaccege ttaaagaate tteageggte aaagteatgg 300 tgaattttaa acaacttcag agtaaaataa caagtacttt atactgcttt atatctaaaa aatgettaca aetteteata aaaatagttt gaageaaeta ttttttettt tatttttaa 360 cagacacgtt caacattacg ggcaacattt ttaaaacctt aagctttaca gactttcaaa 420 cattcaaata ctggggtccc tttcctttga tgtggtttat tcagctagaa aagaaaacat 480 ggtagacaac ttaatacatt ttcaccaaat ttgaaagtag tacaaaaatt ttaggactct 540 600 accgaactac acategtace taatgtatea ttaaaaatag aagacagtat tttetteage 660 aaataaaaca gcatactaat atgctgctaa tgcatacctt ttaatgtgta ctgtcattca taaattattt acaactgcta ctgtgtgaag agaactagaa tgtaaatttt ctgcaaaact 720 ggaaaaaaag caatacaaaa tttgtgaaag cctgtgtttt atactataca aaagtcagtt 780 tttctcttca aataccagat attgtatgca gtgatatttt ggacacatta tagtaattct 840 900 tgaggatgtt ttagtgctgg aggtaagttt acaggcctcg attcttcatc aaggagtact agatetteta titeaetgee tetgtattte ettttacata titttaccae cacettttte 960 ttgagaaata acttcaatgo ttctcttgat gcaactgott ttgcattttc tttgcttttt **1020** 1080 ccacagocag tgcccaaata cacagacttg cacctcaatt cacaaacaat actttcttga gagetettat titgaggeag atetgeeaat tettttagtg ggaeaaaaaa tacateeagt gitgettica gageeteaat agetgeatit aggagetete catgatteae attgggaeta 1200 aagccaccaa cagctaccaa cttccatgcc accgttttat atagtctatt gaaaaaaggt 1260 tgettetgit teacatette attggttaac ttgcaaqaqa atttqacaqa acteteactt 1320 gactgtgaag tacttttaga aggcaactgt gaggtgctag tetgagaact actettagaa 1380 gccaactggg acacacttgc taaggaagtg cttttggaaa ccagagatcc actggtctgg 1440 gagetgetet tggaagetag tagtgatgea getacetggg aagtgetett ggaagttage 1500 agcgatgtat ttgttgaaga gctgctcttg ggagtcagta aggatgtgcc tgatgaggaa 1560 1620 ctgtttttag caactgatga tgaaacactt gcctctgaac tagttttgga agttaaccda cttgaagctg tctctgaact aggtttggaa gacaatagtg gcaattctac ctctgagctt 1680 cctgaggagc ccaacaaggg cacctcgatc tctgagctgc tttgagaagc tgaggctgaa 1740 gageetteea aageactett tttaggtgat ceaetttgtt gtetagaate agtggattgg 1800 gtcatgtgac tattcacact ggatttcagc aaggaaacaa atgatgcaga accgtgttta 1860

1920

```
<210> 5593
<211> 5276
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (644)...(4326)
<223> similar to gi4589640 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 5593 tttcgtggtt gttgtagtaa ccggggaagc agccgtcggc ggctgccctg agccttcctg 60 gggaaggagg agggaggtag gcgcagagcg cggtccacgc ctgctcgccc cgaaccatgg 120 gaagatgaga caggtaaacg cetgegeeeg egegetteee taccetaggg aggageatte 180 cegggtcegg getggcgcet geageaggae ttecegetea gageceggga gtagetgttg 240 getteeggge gegeegegtt gaategegge tgeggggteg teeegteett eeegggggga 300 gcatctgcgg acctacgtgg gattggggtg agctgggggt ggggctgaga agcaaattcc 360 tttcgggaga ggagtctcct tatgaatctg tgccatccaa attgcttgat ccagtgaatc 420 tgctaggaaa ggtctctgag gccccgtct gctgactgca tgacaaaccc taaaggaaat 480 gccaatcgtg atggcccggg acctggagga aacagcatca tcctcagagg atgaggaggt 540 cataagtcaa gaggatcatc catgcatcat gtggactgga ggctgcagga gaattccagt 600 tttggtattc catgccgacg ctattcttac aaaggacaac aatattagag taattggaga 660 acgttatcat ttgtcttata agattgtacg aacggacagt cgcctagtac gcagcattct 720 gacageceat ggattteatg aagtteacee aageageact gactataace taatgtggae 780 aggateceae etgaageeet tettaetgeg caecetetet gaageacaaa aagttaatea 840 ctttcccagg tcttatgaac ttacccggaa ggaccgactg tacaaaaaca ttattcgaat 900 gcagcataca catggattca aggcttttca catcctcccc cagaccttcc tcctgccagc 960 tgagtacgcg gaattttgta attcatattc gaaggaccgg ggaccttgga tagtaaaacc 1020 agtggcatct tcaagggggc gggggcgtct acctgatcaa caatccaaac cagatctccc 1080 tggaagagaa cattttggtc tcccgttaca ttaacaaccc cctgctcata gatgatttca 1140 agtttgacgt gegeetetat gtgetegtga etteetatga teetettgte atetatetet 1200 atgaagaagg attggctagg tttgcaactg tgcgatatga tcaaggagcc aagaacattc 1260 ggaaccagtt catgcatctg acaaactaca gtgtcaacaa gaaaagtgga gattacgtca 1320 gttgtgacga tccagaagtg gaggattatg gaaacaaatg gagcatgagt gctatgctta 1380 ggtacctgaa acaagaaggc agagatacaa ccgcattgat ggcccatgta gaagacctga 1440 tcattaagac tataatctct gctgaactag ctattgctac tgcctgtaaa acctttgttc 1500 ctcatcgcag cagttgtttt gaactctatg gctttgacgt gctcatagat tctactctga 1560 agccatggtt gttggaagtg aatctctctc cttctttggc ctgtgatgcg cctctggacc 1620 taaagattaa agccagtatg atttcagata tgttcactgt tgtaggattt gtgtgccaag 1680 atectgeeca gegggeatea acteggeeaa tttateecae etttgagtet tecaggegaa 1740 accettteca gaaaceteag egttgeegte caetetetge cagtgatgeg gaaatgaaaa 1800 acctcgtggg ctcagcccgg gagaaagggc cagggaagtt gggtggttct gtgcttggtc 1860 tgtcaatgga ggagatcaaa gttttacgaa gggtgaagga ggagaatgat cggcgaggtg 1920 gatttattcg catatttcct acatctgaga catgggaaat atatgggtcc tacctcgagc 1980 ataagacctc aatgaactat atgctggcaa cacgcctctt ccaggacaga atgactgctg 2040 atggagegee agaattgaag atatagagte tgaatteaaa ggeeaagetg catgetgeae 2100

```
tttacqaqag gaagctcctq tctctggagg tgcgaaaacg tagacgacgg agtagcagat
                                                                     2160
tgagggcaat gaggccaaaa tacccagtga ttacccaacc agctgaaatg aatgttaaaa
                                                                     2220
ctgagacaga gagtgaagag gaggaagaag tcgcattaga taatgaagat gaagaacagg
                                                                     2280
aggetteeca ggaggagtet geaggattte ttagagaaaa teaageeaaa tatacaceet
                                                                     2340
cattgacage tttggtagaa aatacaceca aagaaaatte catgaaagtt cgtgaatgga
                                                                     2400
ataataaagg tggacactgc tgcaaacttg agactcagga gctagagcct aaatttaacc
                                                                     2460
tgatgcagat tcttcaagat aatggcaatc ttagcaaaat gcaggcccga atagcattct
                                                                     2520
etgectatet ceageatgtt caaatttege etgatgaaag acagtggegg teagaegtte
                                                                     2580
agtgccagtt gggctgccaa agaggatgaa cagatggagc tggttgttcg tttcctcaag
                                                                     2640
cgagcatcaa ataacctcca gcattcactg aggatggtat tacccagtcg acgattggca
                                                                     2700
cttctggaac gcacaagaat cctggcccac cagctgggtg actttatcat tgtatacaac
                                                                     2760
aaggaaacag aacaaatggc tgaaaagaaa tcaaagaaga aagttgagga agaagaggaa
                                                                     2820
gatggggtga atatggaaaa ctttcaggag ttcatcagac aagcaagtga ggctgaactg
                                                                     2880
gaggaggtgt tgacttttta tacccaaaag aacaagtctg ctagtgtctt cctggggact
                                                                     2940
cactctaaaa tttctaagaa caacaacaat tattctgata gtggggcaaa aggtgatcac
                                                                     3000
cctgagacta taatggaaga agtgaaaata aagccaccta aacagcaaca gacgacagaa
                                                                     3060
atteattetg ataaattate tegatttace actteageag aaaaagagge aaaattagtt
                                                                    . 3120
tatagcaatt ceteetetgg teetactget actetgeaga aaatteecaa cacceatttg
                                                                     3180
tcatctgtta caacctctga cctctctcca gggccttgcc accattcttc tttatctcaa
                                                                     3240
attecttcag ctatececag catgeeteac cagecaacaa ttttactgaa cacagtetet
                                                                     3300
gccagtgett etecetgeet acateceggg gcacagaaca teccaageee tactggeetg
                                                                     3360
ccacgctgtc gatcaggaag tcacaccatt ggtccctttt cttccttcca aagtgctgca
                                                                     3420
cacatctata gccagaaact gtctcgtccc tcttcagcaa aggcaggatc gtgctatcta
                                                                     3480
aacaagcatc attcaggaat agccaaaaca caaaaagagg gagaagatgc ttctttatat
                                                                     3540
agcaaacggt acaaccaaag tatggttaca gctgaacttc agcggctagc tgagaagcag
                                                                     3600
gcagcgagac agtattetee atecagecae ateaacetee teacecaaca ggtaacaaac
                                                                     3660
ctgaatttgg caactggcat cataaacaga agcagtgctt cagetccccc aaccctccga
                                                                     3720
eccatcatca gtectagtgg eccgacatgg tetacacagt cagacececa agetecegag
                                                                     3780
aatcactcca gctctcctgg aagcaggagc ctgcagacag ggggatttgc ctgggaagga
                                                                     3840
gaagtagaaa acaacgtgta cagccaggct acaggggtgg tcccccagca caagtatcac
                                                                     3900
cccacagcag gcagctatca gcttcaattt gccctgcagc aacttgaaca acaaaaactt
                                                                     3960
cagtecegge ageteetgga ecagagtega geeeggeace aggeaatett tggcageeag
                                                                     4020
acactaccta actccaattt atggacaatg aataatggtg caggttgtag aatttccagt
                                                                     4080
gccacagcta gtggccagaa gccaaccact ctgccacaaa aagtggtacc acctccaagt
                                                                     4140
tettgegeet ceetggttee caaaccccca ceeaaccacg aacaagtget cagaagggea
                                                                     4200
acateceaga aagetteeaa agggteetee geggaaggge agetgaatgg actecagage
                                                                     4260
agecttaace etgeageett tgtgeeeate accageteta cagateetge teacactaaa
                                                                     4320
attatgaacc acaaacacac agagaaacaa cctgttcacc actcctgggt gcatgattga
                                                                     4380
gggtgaagca tccaccagca cttcaagggg tccatagtat ttttttttt tgctgcctca
                                                                     4440
aagtccccaa agccttcgag cagaagtggc agtagatggt tgccaatcag ccaatgcaga
                                                                     4500
ctttcactgg gacaacaaga aagcagatct tctgggtttt gatggaactt ggcagtgggg
                                                                     4560
acattcaget gatgcattat atacccegte agageacact tgtatetttt aacetteece
                                                                     4620
tttgccccca tgcccccca aactgcctta ggtccttcct ctgtcccttt acctgctgct
                                                                     4680
gcacagagat gatataaaag aggetetttg getatttgca ttttgcttec tettettte
                                                                     4740
cagattacag tatgaagett tattttettt gtacaagett aaaattteaa cateateate
                                                                     4800
cgcccaaagt tgttcctccc ttttcggagg atctaggggg aaagaggagc attcatcaca
                                                                     4860
agtttcctag agagaggaga caaatcggtg tgccattgac aacatgagcc agggtaaagg
                                                                     4920
caccettegg aattactgat tecaaagatt aataaagtaa tectatett attetette
                                                                     4980
ttttcccttt actaatttcc caacaatcaa tattcacaaa caggactgaa gtagaaccag
                                                                     5040
ttttttattt tactttgtgg ctgtgcaatt ttttaaacat tttagaaatg tgagctgtaa
                                                                     5100
agagatgttt tatttttaca tttcatttca gcagatggtg ggtccaggct attcccaaag
                                                                     5160
gcagetectg cacetgggga gegggcatgt gcagatgtet eegttateag eeetegacag
                                                                     5220
gcaggetcae teacagegtg ggeetceagt ggettgagee etgtatecag ttgeat
                                                                     5276
```

```
<210> 5594
<211> 3281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (141)...(2294)
<223> similar to gi4469187 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5594
                                                                       60
agegggaate gatageatae teagtgtegt ggaattegtg aettetgaea geteteteea
tggaaggagg eggeggeege gatgageett eageetgeeg ggcaggggae gtgaacatgg
                                                                      120
atgaccetaa gaaggaagae attettettt tggccgatga aaaatttgae ttegatettt
cattgtcttc ttcgagtgca aatgaagatg atgaagtctt cttcggaccc tttggacata
                                                                      240
aagaaagatg tattgetgee agettggaat taaataatee ggtteeegaa eageeteegt
                                                                      300
tgcccacatc tgagagtccc tttgcctgga gccctctggc cggggagaag ttcgtggagg
                                                                      360
tgtacaaaga ageteaetta etggetttae acattgagag eageageegg aaccaggeag
                                                                      420
cccaagetge caageetgaa gaceetegga gecagggegt ggaaagatte atacaggagt
                                                                      480
caaaatttta aaattaacct ctttgagaaa gaaaaggaaa tgaagaaaag ccccacgtct
                                                                      540
                                                                      600
ettaaaaggg agacatacta cetgteagae ageceettge tggggeeece tgtgggtgag
                                                                      660
ceteggetet tggeeteete eeeggeeetg eeeagetetg gtgeeeagge eegeeteace
                                                                      720
egggegeegg ggeeteegea etetgeteat getttgeeea gggaateatg caetgeteat
                                                                      780
getgeaagte aggeagegae teagaggaag eeegggaeea aattgetget geetegageg
                                                                      840
gcctctgtta gaggaagagg catccctggg gctgcggaga agcccaagaa agagattcca
                                                                      900
getagteett ceaggacaaa aateceaget gagaaggaat eecaceggga tgtteteeet
gacaaacctg ccccgggtgc tgtcaatgtg ccggccgccg gaagccactt gggccagggc
                                                                      960
aagegggega teeetgttee caaacaagtt ggggetgaag aagaceetgt taaaageace
                                                                     1020
eggetettae ageaattetg caaaggaagt ceteeteggg ggettgtttg gagegggea
                                                                     1080
tccagtgcgt gcactcccca accagtggcc aaagctaaat caagtgaatt tgcaagtatt
                                                                     1140
                                                                     1200
ectgeaaatt ageteeegg eetetgteea aacateagea agteeaggea gaatgggaee
egecatgetg eggecagete tggeetgeag gecetgtggg gtgeateete etggeaggee
                                                                     1260
aagegggteg atgtttetga getggeageg gageagetea eggeaeeeee ceteageate
                                                                     1320
ecceacceaa ecceagaete eggaaggtgg eggeecagtg getgaactee agttgegett
                                                                     1380
ggtcagaatc ttctcaattg aataagacta gaagtatcag acggcgagat tcctgtctaa
                                                                     1440
attocaagac aaaggttatg cotactocta caaatcaatt taaaattoot aagttttota
                                                                     1500
ttggtgactc cgccggacag ctcaacacca aagetttege gggeacageg geegeagteg
                                                                     1560
tgcacgtcag ttggcagggt cactgtccac agcaccccgg ttagacgctc atctgggcca
                                                                     1620
                                                                     1680
gcaccacaa gcctgctgag cgcatggcgt gtgtcagcct tgcccacacc cgccagccgg
egetgetetg geetteeace gatgaceece aaaaegatge eeagggeegt gggeteteee
                                                                     1740
cttgtgtgtg ccagctcgga gacgttcctc tgagccccgc aagaactctg caatgagaac
                                                                     1800
tgaaccaaca agggagagca acagaaagac agattccagg gctggtggat gtgtcccctg
                                                                     1860
acaggggtte tectectice egigtgeete aggeactiaa etitteteea qaqqaaaqeq
                                                                     1920
attotacttt otocaaaagt actgocacag aagtagotog ggaggaagoc aagcogggtg
                                                                     1980
gagatgcage cectagtgag getettettg tagatateaa actggaacea etegeggtea
                                                                     2040
ctccagatgc tgcaagccag ccctcattg accttcctct catcgacttc tgcgataccc
                                                                     2100
cagaagcaca cgtggctgta ggatctgaaa gcaggcctct gatcgacctc atgacaaaca
                                                                     2160
ctccagacat gaataaaaat gtggccaaac cttcaccggt ggtgggacag ctcatagacc
                                                                     2220
tgageteece tetgateeag etgageeetg aggetgaeaa ggagaaegtg gatteeceae
                                                                     2280
tecteaagtt ctaageegaa eeaaateett tgeettgaaa gaacageeet aaagtggttt
                                                                     2340
tcaaccctca gaaacaagct ttaggctggt cgcagtggct tacacttgta accctagaac
                                                                     2400
ttgggagget gaggtgggeg gattaettga geecaggagt tegggaecag eetgggaaat
                                                                     2460
```

```
atagtgaaac teetgteeet acaaaaaata caaaaattag cegggtgtgg tagtgcatge
                                                                     2520
ctgtagtccc agctacttgg gaggctgaag tgggaggatg gcctgagctc aaggagatgc
                                                                     2580
aggetgeagt agggetgtga ttgtgeeact geacteaage etgggeacea atgtgagaae
                                                                     2640
ctgtcttgga aaaaaaaaa aaagaaacat gttttagtag aagttttatt tgaaaaagaa
                                                                     2700
aaataagcat aaatatatte ceagtgeetg eegagggteg eetgeagega etggggeeae
                                                                     2760
caeggaccae ceaaggeete tgetteeege egecaceete etegetgeea ttetetggge
                                                                     2820
tggaatgtga agcctcagtc actctaaatg aagaattttc ttttgaatgt tttgtatgta
                                                                     2880
aaatagcaag tggctatttt taaagttaag tttgtataaa tagttagata ttctagattt
                                                                     2940
acattaaatt gtaaaataaa tggacttatt gaagcatatc ttgattttta agcttatctt
                                                                     3000
gattttcaaa catgcatagc tatttttatc actctaatca gtaaggctac tatctagact
                                                                     3060
cgaatgcttt catacaagtg attttcaaaa attagtcaat aaaaattgat gtcagtgcag
                                                                     3120
ggcccaggcc cgcccccaga tacactagtt tctaggtctg gggccagcct agtaattgtt
                                                                     3180
actaggcaca caggtgatgc tgactcgatg gcctgagaca caccccttga gaagaagctg
                                                                     3240
ctctggggag acgagggtat gagtggaaag aggatgggcg a
                                                                     3281
```

```
<210> 5595
<211> 6233
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5734)...(1911)

<223> similar to gi5305331 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5595
ttttttttt ttaaaaaatt tacccatttt attgatgcat tgcaattgct ctacatttta
                                                                    60
ccatattatg tagaaaatac tgaaaataca agctactttg taaaaccaaa gacaaacatt
                                                                   120
gaatccaaag ataaactatg ttttacacaa tggacccttt tcccatagtt agtattaaat
                                                                   180
tttaaatato tatttotttt gttaaaatga ttattttaca tactoocota aggtacatot
                                                                   240
ggcattacaa acataggete agtaattete aaaaactate tgtttetagg agggettgtt
                                                                   300
ggttaaaggg aaggcggcac aacccaaaaa agggggggaa ggccaaaaaa agttttaaat
                                                                   360
cggcacacaa taacctagca tatcaaatac atttattaaa agtagggaat tcccattgca
                                                                   420
atatcaaagg attcaaaggc agaaatacta acattacata taatgtacat ataatgtact
                                                                   480
gctacatgta gtgagattat ttttcaagct gaattgaaac cccccttat ataaagttta
                                                                   540
gcaacaaaca accatgtaga catgctgccc catttatcag ttaaaaaaaaa aaaaatcaaa
                                                                   600
660
acaaaccatc tcaactagtg aatttttgca taataatgct gaacaaaaca cacattactg
                                                                   720
tgcttgcctg gctaagggca gtcaagctta gcccctctag tggaggacaa tggatgagca
                                                                   780
atcacaaaag caggeteaga atggeeagaa etgtttgaaa tggagttett atteetgggg
                                                                   840
ttggtatttc agctgagcac tgaaaataat atcacctcct gggagctatt aaaaactctg
                                                                   900
gagtgaccaa gtgtccctat gagcccagag tggctacact gaacccttct ccgcttcttc
                                                                   960
tctcacccgg aaaggaagaa gttggaaatg ccaagttctg agagaggact taaagcctta
                                                                  1020
agetggtttg aggteaggte aetgtgaeee aggeeagetg eteactaaat teaceagget
                                                                  1080
tectecette etgteaggge ceacaggget aaccecaggg acagaateta aagceacagt
                                                                  1140
gagcacatac atacacattc agcagacaca ggtggatttt tatgctggaa aatcggaaat
                                                                  1200
gccagtttgc agactaagac tgaaaaatct ctagttttta aagccacaca ctgctaggca
                                                                  1260
agtgactaag gtaacaatac aagctcttgg tattatcctt ttctgtggag tttagactcc
                                                                  1320
tatcttaagt ggtatctgct tattggactg gggtgcagga atgggatttg gttttctttc
                                                                  1380
```

```
ctgcatctca tttcttacaa aaacaacaaa tcttgtccct tacagaaaaa agacaaggaa
caaaaaattt gtcctttaga aactagacct gtgttccaac aagaaaatca gaatgtgctt
                                                                    1500
ggcaaaaagg agacacaaag atcacacatg ttgaccagaa aactgtatga cactagtgac
                                                                    1560
agaaattata caaactgctt ggctatcttg accaatatag tgctgaaaac acaactcaat
                                                                    1620
ataatgattt taaaaaataa agaaaacaca acatgttcct ggtaggctgt acggactacc
                                                                    1680
tgccccatct tggaagccct tactccttac aatgaagaaa ctccaaatac tttgacagct
                                                                    1740
cctcggtgtt caacctggta cagagctggc tgaccaggct ccatgaaatc tcccatctcc
                                                                    1800
atcctgcacc tccttgacac catctctatc tacacagaac cagtcctaaa attatatctc
                                                                    1860
aaatatatca ttttcaattc agatggaaca cacctgtatt ttaggattaa tcttctttcc
                                                                    1920
                                                                    1980
ccaaatcctt tatgggcagg aatgtcccca tccccagtac cttctacttg acccagatcc
atgcaggage tgagagtaca aggacaattt cacagettga agggeeecaa gaetatacaa
                                                                    2040
gctgttaaaa aagaaacctc aaaagcctca atgactcaac aggctttggt tccttctcta
                                                                    2100
tattetteae cagetaagaa acetttetgt gagtteettg teaccagegg caccacaaaa
                                                                    2160
cttctcctca tagtatgggg acatggtaag caatacaaca ggctctttgg tataaacaca:
                                                                    2220
tetgttaaca tgttttttte aacaagcaaa tattttaeta ggaatgteaa etatgtgeag
                                                                    2280
gaaggactgc cccatgggaa aaggaaaaaa aaattcattc taaaagtgat tgcacatact
                                                                    2340
ttaaaagaat gcatatttaa tattggcttg actcctctca cctgcttcct gaattctcac
                                                                    2400
agaagcaagg tagcaacgca cagtgagaga gccacatggg gaaaatgctt ctgtgagaac
                                                                    2460
teageegaga ateeaaaatg gaaaggggta gaggtggtgg taaaggagaa aagetgetgt
                                                                    2520
ttttattttt caatgttggc agggaaactg agaacaatgc attacacaat acagctacta
                                                                    2580
atcetgttet gataaateee ggtgaacaae ttagggteea egggggettg etggteeate
                                                                    2640
ctaaggcaag ctcactgtaa actctattaa ccactacatt atcatataag gcactacaat
                                                                    2700
2760
acctgtgcaa aacaattcca agggtctcct ctccttgcag gcaatgcccc tgctcattca
                                                                    2820
gcactacagt aatatgctct aatataattg caattagttc acatacattc caacaagtat
                                                                    2880
cagttcattt tggtttaaat acaatggaga catcaatcca tctccgggat aacactggag
                                                                    2940
gatcacatac acactaagta cacaattcaa gtgtaatcac tacacatttg attacaaata
                                                                    3000
acattttggg ttagcaggaa aaattgcttg ttatattttt ctaatcaata tgtacatatt
                                                                    3060
taattatgta aaatattaaa acaccaccat tacaaaactt ctaaaatatt tttaaattca
                                                                    3120
gtaataaatt tttaaaaatat tttttgcaat tcctacatgc ccttattata taagtcttaa
                                                                    3180
taagagagca ttcaatttgc tgctggcata caaaggaagc tactttgaag tataaaagct
                                                                    3240
atacccaaga aatgttetta tetggtttea ggttttttta getttetee caaacaaate
                                                                    3300
adataaaada gaagggagag atgagdaaaa cagaggtgta ttadtgaaaa ttdatactaa
                                                                    3360
tetttaggea aageteatea atgeeagtat eteataatag acagagattt tgeatataat
                                                                    3420
aaaaccacca ccaccatgta ataataacca ccttaatggc tttttcgata aaaaaattta
                                                                    3480
agctgaatca gagagagaaa gacttttaaa aaataattta aaaaagaatt catggtgctt
                                                                    3540
catttaaaaa gaatacttgg tgttttcacg cagatatgga ttctctcaca ttaagttacc
                                                                    3600
agcaaatggt gagctgcctt ttaaacacta ctttataaca aacacaggag caattgagag
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aatctcaata gtaacacaga gtaatacgta accagttttg caaaaataac aattgcccat
                                                                    3720
taagtataat atgacattaa aacaaaactg aaactctgta agtttaaatg tccaataaac
                                                                    3780
aaaagggaga ttgtgtaagc cgcttttaaa ataaaatagg caagtctgag tttataaaca
                                                                    3840
aacaaaaagt aattttttt tttttgtcat cagatttcaa ctccttctat cagcattttt
                                                                    3900
cctgaccage aatcacaata acacaaaatg aaataaagag gggcttcact tgtttttaaa
                                                                    3960
agcatttata gaaatcaagt cagagagaca aaatattttt cagagggtaa cttcagaaca
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atctctcttc cttggtaact gcagaagatg ggcatctgaa ctcttccaag taccaaaatt
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actgtcacaa aaataatgaa tttaaaaaata gggcaaactt tgagaagact acaacaatgc
                                                                    4140
agtcaacact gagacaggtt cccccagaga aaaaccttct gcttcagtgg gcccctgcag
                                                                    4200
aacaagttgc tggctaagaa atttcaagag ggtaaaggag gatctctcca tagcccaata
                                                                    4260
ttaagaacgc agggccagga gaaggtagcc atgattcctc ctccctcatg ctcaccaact
                                                                    4320
ataagtagga atactggctg atcttggtag gactcagcgg gtatccagtg taaattgttg
                                                                    4380
agcctcggga agacccaatg taggattggg tggcaaactg gtgttggtac tgagcagggg
                                                                    4440
ccacgetgge agaagtgagg aggetgggee caacactgae agggaeetgg tgcaccaaag
                                                                    4500
tgctagggtg agtggtatag gctgcagcat gccttgagga accctgtggg gagaaaagat
                                                                    4560
gagcaatgga gctggttgag cccagtgcag cagcagaagt cggggcagca tacgtataca
                                                                    4620
gatgagcctg gcttggcagg tgagcagggg ccggggcaag gtgtgggtgc cctgtcgagt
                                                                    4680
gtagcgggct gccatgctgg aaggtgtagg gggcttggga gagaggggcc acaaacgcct
                                                                    4740
getgeetgeg gggggetggg ttgetgette teteetgtga ggttggagee geegatgaet
                                                                    4800
```

```
getggttetg getaagattg agtggttgtg etgeactggt eececegegt tgagetegat
                                                                     4860
accetgtggg ggtgatacag catceagatg actgeecact caetgaageg actggettag
                                                                     4920
                                                                     4980
tettattget caggagacet gaggeetggg ttgetacagt geagteacea agetgagttt
tcagtggagg cacaatgata gtgcgggtgc cagtgccatc tgccacaact ctgccaggcc
                                                                     5040
cctccaaaac ggatccacta ttgcctcgga gagcactcag ggtatcagtg gaataagggc
                                                                     5100
tgctcaaaga agagtcagag tctggagaat cattgacagt gacataactg atgacattag
                                                                     5160
accttggctt cagtccagag ctactgggct tgtatttgtt gtcctcttcc tcatcagtgt
                                                                     5220
cacttoggat agtgatgaca ctcacaggag ggctgggagt atctggaatg atgatgggct
                                                                     5280
gatgctgatc ttggacaggg accaaggaat tataagaaga tgtggtgcgg aggggactgc
                                                                     5340
teccaaceag agaatagaet tgggaaggea gaacatetag agaggaettg gaagagaetg
                                                                     5400
gagetgactg etttatteet ettegaaggg agggaactgg attgttgttg tetgacaaca
                                                                     5460
tgggcaacac caacattcag aggctgagca gtggccaatg tcacatggtt agtcagcaag
                                                                     5520
gatggctgct gcatgatagt gctgtactgg ttgccatgag agtgggcatt cctccagtca
                                                                     5580
getagetget gtecactece catggeetet ggaateattg etgtgggetg gacagaattg
                                                                     5640
tgtagageta ecceaggeaa etgttgeeaa gttgaaggea ggagaatttg etgagteeet
                                                                     5700
ccaggccacg cctgcagtac ageggcagtc tgttcaacca gegceggceg geeggctgeg
                                                                     5760
cageteagag taaagggeae egeataetge ggtgtgatgg tggetaettg agggtggaga
                                                                     5820
gttgctacca ttagtggtgt acagettece tgcgtgagaa etcetgactg aatetgtagt
                                                                     5880
ggctgagcag ctggtgcctg gggtacaatc ggtacagcat tatccatcct cacagggaat
                                                                     5940
ccagaatgct ttgttgttgc ttgtagtcca gtttgaaacg caggtggaca tactataaat
                                                                     6000
gtctgttgga atggatctgt ctgagtgcaa atctgggtgg ttccaggctg caaggaaaca
                                                                     6060
ccctgctggg caactccagg aactggtgca gcagatgatg ggtacaaagc tgactggtag
                                                                     6120
tttagtagtg agacatetga attagecaga gaaagagtag cagetgetge agtagaactg
                                                                     6180
gaagctagaa cactggctga ttgctatgtg gaaaatccaa aaggtgagtc att
                                                                     6233
```

```
<210> 5596
<211> 4321
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (232)...(3905)
<223> similar to gi1702924 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5596
agtcgacgat ttcgtcggcc gtggccgctc ggggcgcagc ggtagttttg tgtgtgta
                                                                       60
cagcggggga cgcgctgc cggctcctgg gctggcgaca gattgtgcag gaatgcgagg
                                                                     120
aatgcaccag gggcagagtc cacacagtcc gccgcggctg ccctagcgcc ttccctcccc
                                                                      180
agetetegee gegeageeag aggteaeegg ageatetteg gagetggagg aatgceaget
                                                                     240
cctgagcagg cctcattggt ggaggagggg caaccacaga cccgccagga agctgcctcc
                                                                      300
actggcccag gcatggaacc cgagaccaca gccaccacta ttctagcatc cgtgaaggag
                                                                     360
caggagette agtttcageg acteaceega gaaetggaag tggaaaggea gattgttgee
                                                                     420
agtcagctag aaagatgtag gcttggagca gaatcaccaa gcatcgccag caccagctca
                                                                     480
actgagaagt cattteetti gagateaaea gaegtgeeaa ataetggtgt aageaaaeet
                                                                      540
agagtttetg aegetgteea geecaaeaae tateteatea ggaeagagee agaaeaagga
                                                                     600
accetetatt caccagaaca gacatetete catgaaagtg agggateatt gggtaactea
                                                                     660
agaagttcaa cacaaatgaa ttcttattcc gacagtggat accaggaagc agggagtttc
                                                                     720
cacaacagcc agaacgtgag caaggcagac aacagacagc agcattcatt cataggatca
                                                                      780
```

```
actaacaacc atgtggtgag gaattcaaga gctgaaggac aaacactggg tttcagccat
                                                                      840
cagtagccaa tegggecatg agaagagtta gttcagttcc atctagagca cagteteett
                                                                      900
cttatgttat cagcacaggc gtgtctcctt caagggggtc tctgagaact tctctgggta
                                                                      960
gaggatttgg ctctccgtca gtgaccgacc cccgacctct gaaccccagt gcatattcct
                                                                     1020
ccaccacatt acctgctgca cgggcagcct ctccgtactc acagagaccc gcctccccaa
                                                                     1080
cagetatacg geggattggg teagteacet eeeggeagae etecaateee aaeggaeeaa
                                                                     1140
cccctcaata ccaaaccacc gccagagtgg ggtccccact gaccctgacg gatgcacaga
                                                                     1200
ctegagtage ttecceatee caaggecagg tggggtegte gteccecaaa egeteaggga
                                                                     1260
tgaccgccgt accacagcat ctgggacctt cactgcaaag gactgttcat gacatggagc
                                                                     1320
aattoggaca goagcagtat gacatttatg agaggatggt tocaccoagg coagacagoo.
                                                                     1380
tgacaggett acggagttee tatgetagte ageatagtea gettgggeaa gacettegtt
                                                                     1440
ctgccgtgtc tcccgacttg cacattactc ctatatatga ggggaggacc tattacagcc
                                                                     1500
cagtgtaccg cagcccaaac catggaactg tggagctcca aggatcgcag acggcgttgt
                                                                     1560
ategeacagg tteagtaggt attggaaate tacaaaggae atecageeaa egaagtaeee
                                                                     1620
ttacatacca aagaaataat tatgctctga acacaacagc tacctacgcg gagccctaca
                                                                     1680
ggcctataca ataccgagtg caagagtgca attataacag gcttcagcat gcagtgccgg
                                                                     1740
ctgatgatgg caccacaaga tccccatcaa tagacagcat tcagaaggac cccagggagt
                                                                     1800
ttgcctggcg tgatcctgag ttgcctgagg tcattcacat gcttcagcac cagttcccat
                                                                     1860
ctgttcaggc aaatgcagcg gcctacctgc agcacctgtg ctttggtgac aacaaagtga
                                                                     1920
agatggaggt gtgtaggtta gggggaatca agcatctggt tgaccttctg gaccacagag
                                                                     1980
ttttggaagt tcagaagaat gcttgtggtg cccttcgaaa cctcgttttt ggcaagtcta
                                                                    2040
cagatgaaaa taaaatagca atgaagaatg ttggtgggga tacctgcctt gttgccgact
                                                                     2100,
gttgagaaaa atctatttga tgcagaagta agggagcttg ttacaggagt tctttggaat
                                                                     2160
ttatcctcat gtgatgcctg taaaaaatga caatccattc cgaaaatgct ctcctcaacc
                                                                     2220
cttaaacaaa aacactgtga ttggttcccc acattcctgg gaatggaaat aactccttcc
                                                                     2280
ttttgatgga tgaatccata aaattaaatt ttcagacttc actagttcct gcgtaacacq
                                                                     2340
gacaggttgc cctaaggaac ctcagctctg cgggggaaga agctcggaag caaatgcggt
                                                                     2400:
cctgcgaggg gctggtagac tcactgttgt atgtgatccc acacgtgtgt gaacacatcc
                                                                     2460
gattacgaca gcaagacggg tggagaactg cgtgtgcacc ctgaggaacc tgtcctatcq
                                                                     2520
gctggagctg gaggtgcccc aggcccggtt actgggactg aacgaattgg atgacttact
                                                                     2580
aggaaaagag teteccagea aagaetetga gecaaagttg etgggggaag aagaagaaaa
                                                                     2640
agaaaaagag gactccgcaa gaagatcaat gggatggagt tggtcctatc ccaggactgt
                                                                     2700
cgaagtcccc caaaggggtt gagatgctgt ggcacccatc ggtggtaaaa ccatatctga
                                                                     2760
ctettetage agaaagttee aacceageea cettggaagg etetgeaggg teteteeaga
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acctetetge tageaactgg aagtttgeag catatatece gggeggeeeg teegaaaaga
                                                                     2880
aaaggggctc cccatccttg tggagcttct gagaatggat aaccgataga gttgtttctt
                                                                     2940
ccgtggcaac aagccttgag gaatatggca ctagatgttc gcaacaagga gctcataggc
                                                                     3000
aaatacgcca tgcgagacct ggtcaaccgg ctccccggcg gcaatggccc cagtgtcttg
                                                                     3060
tctgatgaga ccatggcagc catctgctgt gctctgcacg aggtcaccag caaaaacatg
                                                                     3120
gagaacgcaa aagccctggc cgactcagga ggcatagaga agctggtgaa cataaccaaa
                                                                     3180
ggcaggggcg acagatcatc tctgaaagtg gtgaaggcag cagcccaggt cttgaataca
                                                                     3240
ttatggcaat atcgggacct ccggagcatt tataaaaagg atgggtggaa tcagaaccat
                                                                     3300
tttattacac ctgtgtcgac attggagcga gaccgattca aatcacatcc ttccttgtct
                                                                     3360
accaccaacc aacagatgtc acccatcatt cagtcagtcg gcagcacctc ttcctcacca
                                                                     3420
gcactgttag gaatcagaga ccctcgctct gaatacgata ggacccagcc acctatgcag
                                                                     3480
tattacaata gccaagggga tgccacacat aaaggcctgt accctggctc cagcaaacct
                                                                     3540
tcaccaattt acatcagttc ctattcctca ccagcaagag aacaaaatag acggctacag
                                                                     3600
catcaacage tgtattatag tcaagatgae tccaacagaa agaactttga tgcatacaga
                                                                     3660
ttgtatttgc agtctcctca tagctatgaa gatccttatt ttgatgaccg agttcacttt
                                                                     3720
ccagcttcta ctgattactc aacacagtat ggactgaaat cgaccacaaa ttatgtagac
                                                                     3780
ttttattcca ctaaacgacc ttcttataga gcagaacagt acccagggtc cccagactca
                                                                     3840
tgggtgtacg atcaagatgc ccaacagagg aactctttct ttctaacctt gttcagattg
                                                                     3900
aggtgaaaag tccatcttgc tgatttcatg attgaaatgt gaaagtgaag tggaaggaat
                                                                     3960
gaatgaagtg tgttttttt ttttctttt tgaggaatta tcagggaagt gaggaaatgt
                                                                     4020
ttgggagagg actttctaag ctctatttag gtgttagatc taattactta tagattctgt
                                                                     4080
agtctggtga aggtgtgggt gacgtgatga gaggtttgag aaatgggtga aatgaaatgg
                                                                     4140
gggatatgta ggtcaaatca aattaaagat gattttttta atgtgaataa agttatgttc
                                                                     4200
```

```
tgataagttt gtacagaaaa aataaaatgg atgcccatgt tttattgcta ttactaaatg 4260 tcaagattgt atgctattat gtcttgtaaa tttcttttgt tggtgtaaat atggaaatgc 4320 c 4321
```

```
<210> 5597
<211> 2197
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (608)...(2180)
<223> similar to gi3947613 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5597 tgtaatgtag ggggaggcgg gggaggcttc aaacatccgt gtcttcaaga ggcgcaggcg 60 ggtgaatteg gaetgtgaet etgtgttaee etecaaette etectggggg geaatatett 120 tgatcccctg aacctgaata gcctcctgga tgaggaagtg agccgcactc tcaacgcgga 180 gacccetaag teateceece tteeggeeaa agggegagat eeggtggaga teeteateee 240 caaagatatt actgaccege teagteteaa taettgeaet gatgagggee atgtagttet 300 tgcttcgcca ctcaagactg gtcggaagcg gcatagacac cggggacagc accaccagca 360 gcagcaggca gccggaggga gtgagagtca ccccgtgccg cccacagccc ctctcacccc 420 cttactccac ggggagggcg cctcacagca gccgcggcac aggggccaga accgggatgc 480 cccccaaccc tatgaactca acacagccat caactgcagg gatgaagtgg tgtctcccct 540 tecatetget etgeagggte ceteaggete cetateagee cetecagetg ceteagttat 600 etetgeacce ceatetteet eetecegaca tegeaaacgt egeaggaett eeagcaagte 660 ggaggcaggg gctaggggtg gaggccaggg ttccaaggaa aagggccgag ggagttgggg 720 aggeegeeae caccaceaee acceaetgee tgeageagge tteaaaaage aacagegeaa 780 gttccagtat gggaattatt gcaaatacta tgggtaccgc aatccttcct gtgaggatgg 840 gegeettegg gtgttgaage etgagtggtt teggggeegg gaegteetag atetgggetg 900 caatgtgggc catctgaccc tgagcattgc ctgcaagtgg ggcccgtccc gcatggtggg 960 ectggatate gattecegge teatecatte tgeeegeeaa aacateegae actacettte. 1020 egaggagetg egteteceae eccagaettt ggaaggggae eegggggeag agggtgagga 1080 agggaccacc accettegaa agaggagetg etteccagee tegetgaetg eeageegggg 1140 teccateget geceecaag tgecettgga tggageggae acateagtet tecceaacaa 1200 tgttgtcttc gtcacgggta attatgtgct ggatcgagat gacctggtgg aggcccaaac 1260 acctgagtat gatgtggtgc tetgeeteag ceteaceaag tgggtgeate tgaactgggg 1320 agacgagggc ctgaagcgca tgtttcgccg gatctaccgg cacctacgcc ctgggggcat 1380 cctggtccta gagccccaac cctggtcgtc gtatggcaag agaaagactc ttacagaaac 1440 gatetacaag aactactace gaatecaatt gaagecagag cagtteagtt cetacetgae 1500 atccccagac gtgggcttct ccagctatga gcttgtggcc acaccccaca acacctctaa 1560 aggettecag egteetgtgt acetgtteca caaggeeega teeceeagee actaagtgge 1620 cccctaaaca gaaagtgtga agaggctgcc ctcgctgctc ataaggacct gggggaagag 1680 gaaagtgtcc caaggicttt cctttctgac tccaaaaata gtttcctttc ttggatctgc 1740 aaagaaaget tttetteegt egetgeetea geeteeteee tatgeetetg geacetgege 1800 agcaaggetg getgtgetgg agteaceate atetteetet ecceeageet eccaggetgg 1860 atggcatgga ctgtttgctg acctctgttc tcttagggca tgggaggtgg gaggatatca 1920 aattetetag ceettteete etatteteee aaggagagag atteeeattt eteeteggee 1980 attgtaccta getettgtee etagetgeat tteagtggae catggataga gggaetgagg 2040

```
gttagacggg gaagactggc agggaggcac gcaggtactg tgaaaatcct tccctttgcc 2100 ctcccccagt gggagagggg gttgggtttt caatgtgaga acagcacaat aaacttgatg 2160 tctagggcag tggccccac ccctgtcaaa aaaaaaa 2197
```

```
<210> 5598
<211> 4378
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (230)...(4154)
<223> similar to gil228045 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5598
gtteetgeag atagagtetg ecteceetge eccettetet tetggattee tegetgeeea
                                                                       60
ecetcattet ecegggggaa geetegeaac gaagggeegg ageegeettt etgeteeegg
                                                                      120
aatgetteae etgteegeag eteegeeege eeeaceeeg gaagtgaegg egaeegegeg
                                                                      180
gccctgcctt tgttccgttg ggcgtcgcgg cgacggcggg aagatggcgg cggcgggagc
                                                                      240
cctggaacgg agcttcgtgg agctaagcgg agctgagcgc gaaaggccga ggcactttcg
                                                                      300
ggaattcaca gtctgcagca ttgggactgc aaatgccgtg gctggcgccg taaaatacag
                                                                      360
tgaaagcgcg ggaggctttt actacgtgga gagtggcaag ttgttctccg taaccagaaa
                                                                      420.
caggiticati catiggaaga cciciggaga tacatiggag cigatggagg agicacigga
                                                                      480
cataaatctg ttgaataatg ccattcgcct aaaattccaa aattgcagtg ttttacctgg
                                                                      540
aggggtttat gtctctgaga ctcagaatcg tgtgataatc ttgatgttaa ccaatcaaac
                                                                      600
agtgcacagg ttacttttac cacacccctc ccggatgtat aggagtgagt tggtagttga
                                                                      660
cagtcagatg cagtcaatát tcactgacat tggaaaagtt gatttcacag atccttgcaa
                                                                      720
ctatcagtta attccagcag tacctggaat atctcctaat tccaccgcct ctacagcctg
                                                                      780
getcagcagt gatggggagg coetgtttgc ettaccatgt gettetgggg gaatetttgt
                                                                      840
tettaageta ceteettatg acatacetgg tatggtgtca gtegtggaac tgaaacagag
                                                                      900
ttcagtaatg caacgattgc ttacaggctg gatgccaaca gctatcaggg gtgaccagtc
                                                                      960
gccttcagat cgtcccctca gtcttgctgt tcattgtgtg gagcatgatg ccttcatctt
                                                                     1020
tgctttgtgt caggatcata aactacgaat gtggtcttac aaggagcaaa tgtgcctaat
                                                                     1080
ggtagetgae atgetggagt atgteeetgt gaagaaagae etteggetta etgetggaae
                                                                     1140
tggacacaaa ttacggcttg cttattcccc caccatggga ctctacctgg ggatattcaa
                                                                     1200
tgcatgcacc aaaacgagga cagttctgca ttttccagtt ggtgagcact gagagtaatc
                                                                     1260
getatagtet egateatatt tetteaetgt teaettetea ggagaeaetg attgaetttg
                                                                     1320
cettaaette caeggatate tgggeeetgt ggeatgatge tgagaaceaa acagtagtga
                                                                     1380
aatacatcaa etttgaacat aatgttgcag gtcagtggaa tecagttttt atgcageete
                                                                     1440
tgccagagga agagattgtc atcagagatg atcaagaccc cagagagatg tatctgcaaa
                                                                     1500
gtctttttac accaggacaa ttcacaaatg aagctttatg taaggcttta cagattttct
                                                                    ,1560
gccgaggaac tgagaggaat ttggatcttt cctggagtga actgaagaaa gaagttactt
                                                                     1620
tagetgttga aaatgagett caaggaagtg taacagagta tgaattetee caggaggagt
                                                                     1680
ttcgaaattt acaacaagaa ttctggtgca agttctatgc ctgttgtctt cagtatcaag
                                                                     1740
aagccctctc tcaccctctt gccctacatt tgaatccaca cacaaacatg gtgtgcctgc
                                                                     18.00
tgaaaaaagg gtacctgtct ttccttattc cctcatcctt agtggatcat ttgtatctcc
                                                                     1860
tgccttatga gaaccttttg acagaagatg agacaaccat atctgatgat gtggatatcg
                                                                     1920
ctcgggatgt catatgtctt ataaaatgcc tccggctgat tgaagagtca gtaactgtgg
                                                                     1980
atatgtcagt tataatggaa atgagttgtt ataacctaca gtctccggaa aaggctgcag
                                                                     2040
```

```
agcagattct ggaagatatg atcactattg atgtagaaaa tgtgatggag gatatttgta
                                                                   2100
gtaaactgca agagattagg aacccaatcc atgcaattgg actacttata cgggaaatgg
                                                                   2160
attatgaaac agaagtggaa atggaaaagg gattcaatcc agctcagcct ttgaatattc
                                                                   2220
gaatgaatct tacccagctc tatgqtagta acacagcagg gtatattqtg tqcagaqqqq
                                                                   2280
tgcataaaat egecagtact egttteetga tetgeagaga tettttgate ttacageage
                                                                   2340
tgttaatgag gettggagat getgtgattt ggggaactgg teagetettt caageteage
                                                                   2400
2460
gtgagtgctt ggcaactgat gttccacttg acacactgga gtctaatctc caacacttat
                                                                   2520
cagtactgga attaacagac totggtgctt taatggcaaa taggtttgta totagtcctc
                                                                   2580
agactattgt ggagttattc ttccaagaag ttgcaagaaa acacattata tctcacctct
                                                                   2640
tototoágoó aaaggoacot otgagocaaa otggattgaa ttggootgaa atgattaotg
                                                                   2700
caattaccag ttatttattg cagettttat ggeetageaa teetggttgt ététttetag
                                                                   2760
aatgtttgat gggaaattgc caatatgtac aattgcagga ttatattcaa ctgctacatc
                                                                   2820
cotggtgtca agtcaatgtt ggttcctgtc gatttatgct gggaaggtgt tacctagtta
                                                                   2880
caggagaagg acagaaggct ctggaatgtt tttgtcaggc agcatctgaa gtaggcaaag
                                                                   2940
aggaattett ggategettg attegeteag aggatgggga gategtgtet acceecagge
                                                                   3000
tgcagtatta tgacaaggtt ttacgactac tagatgtcat tggtttgcct gaactggtta
                                                                   3060
ttcagttggc tacatcagcc ataactgaag caagtgatga ctgggaaaag tcaggctact
                                                                   3120
cttaaggaca tgtattttca aacatcattt gggatttggg gtcacaatag ccaagcatat
                                                                   3180
ggaagcettt aaccccaaat teetgattee ageaggeaat tagattgttt aeggeagttg
                                                                   3240
gtggtagttc tttgtgaacg ctcacagcta caggatcttg tagagttttc ctatgtgaat
                                                                   3300
ctgcataatg aggttgtggg aataattgag tcacgtgcta gagctgtgga ccttatgact
                                                                   3360
cacaattact atgaacttct gtatgeettt cacatetate gecacaatta ceqeaaqqet
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ggcacagtga tgtttgagta tggaatgegg ettggcagag aagttegaac teteegggga
                                                                   3480
cttgagaaac aaggcaactg ttatctggct gctctcaatt gtttacgact tattcgtcca
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gaatatgegt ggattgtgea gecagtgtet ggtgeagtgt atgategeee tggageatee
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cctaagagga atcatgatgg agaatgcaca gctgcccca caaatcgaca aattgaaatc
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ctggaactgg aagatetgga gaaagagtgt teettggete geateegeet caetttgget
                                                                   3720
cagcatgate cateageggt tgeagttget ggaagtteat cagcagagga aatggteact
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etettggtte aggegggeet etttgacaet gedatateae tetgteagae ttttaagett
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ccettaacge cagtetttga agggettgee tteaaatgea teaaattgea atttggagga
                                                                   3900
gaggcagcac aagcagaagc ctgggcctgg ctagcagcca atcagctctc atctgtcatc -
                                                                   3960
actactaagg agtetagtge tacagatgaa geatggegae tattateeae ttaeetggag
                                                                   4020
aggtacaaag tecagaataa ettgtáteae caetgtgtaa teaacaaget ettgteteat
                                                                   4080
ggagtgcctc tgcctaattg gcttataaac agttacaaga aggttgatgc tgctgaattg
                                                                   4140
ettegettat aettaaaeta tgaeetttta gaettaaete eetateaggt gateagaata
                                                                   4200
tgtggatgct gaattggtga aaagacatca ctacttatca atcgacgtac caatggccgc
                                                                   4260
tacagtecea gtgeagagae ttaegtaete etetattgat caaettaace aaaetttggg
                                                                   4320
aaagaactgt gccatcagta cocacattoc actggcccaa aaaatccttt acttitit
                                                                   4378
```

```
<210> 5599
<211> 3925
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . (3926)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (208) . . . (2552)
```

```
<400> 5599
gggtttgttg acageggagg cggcggcggc tgcaggctcc gagccgtagg agccggatcg
                                                                       60
                                                                      120
ggggagggc cgggcccagg agcctcagcc ccgccggcag ccctaagggc aaggcagtgg
                                                                      180
ctetgecaat gateetgiga gtatteagga atcactgitg eccetgggga teettgicet
ggagtggccc acctgcttgc ccccagcatg gcgtccgaca ctcccgagtc gctgatggcc
                                                                      240
ctetgtactg aettetgett gegeaacetg gatggeacee tgggetacet getggacaag
                                                                      300
gagaccetge ggetacatee ggacatette ttgeecageg agatetggtg accggetegt
                                                                      360
                                                                      420
caatgagtat gtggagetgg tgaacgetge etgtaactte ggageeacae gaagagette
ttcaaccctc tttttcggga ccccgcaag caacccgcct cacggcggat ccaccttccg
                                                                      480
                                                                      540
tgaggaccct ggtgcaggac ccaggaccct ggaggccatc cgcaagcagg acctgggtgg
                                                                      600
agettgtace tgactaactt gegagaaget gteegeeaag ageetgeaga caetgaggag
                                                                      660
cttcagccac accetgggtg ttccttgage ctttttcggc tgttacaaac attttnttat
tgaggaagga gaacccaggg gggcttttga agatgagtac ctcttcaacc ccacctgcca
                                                                      720
                                                                      780
ggtgctggtt aaggatttca cettegaggg etteageege eteegettea etgaaattgg
geegeatgat tgattgggte cetgtggagt eegetgetge ggeegettaa eteeetgget
                                                                      840
geettggace teteaggeat teagaegage gaegeegeeg tteeteacce agtggaaaga
                                                                      900
cagectgggt gtecetegte ettetacaac atggacetgt eegacgacea cateeggggt
                                                                      960
categigeag etgeacaage igegacacet ggacatetee egagacegee tetecageta
                                                                     1020
ctacaagttc aagctgactc gggaggtgct gagcctcttt gtgcagaagc tggggaacct
                                                                     1080
aatgteeetg gacatetetg ggeeacatga teetagagaa etgeageate teeaagattg
                                                                     1140
ggaagaggga ageggggeag accageatte gageetteea agaggeagea teatacettt
                                                                     1200
ceggggtttt gaaggaggge egetgeagtt teeteggggt tttttgagga attttttgtg
                                                                     1260
                                                                     1320
geegeeteae geacatteea geetacaaag taagtggtga caaaaaegaa gageaggtge
tgaatgeeat egaggeetae aeggageace ggeetgagat eacctegegg geeateaact
                                                                     1380
tgctttttga catcgcccgc atcgagcgtt gcaaccagct gctgcgggcc ctgaagctgg
                                                                     1440
teateaegge ceteaagtge cacaaatatg acaggaacat teaagtgaca ggcagegeeg
                                                                     1500
etetetteta eetaacaaat teegagtace geteagagea gagtgtgaag etgegeegge
                                                                     1560
aggttateca ggtggtgetg aatggeatgg aateetacea ggaggtgaeg gtgeagegga
                                                                     1620
actgotgoot gaogetetge aactteagoa teecogagga gotggaatte cagtacogoo
                                                                     1680
gggtcaacga geteetgete ageateetea acceeacgeg geaggaegag tetateeage
                                                                     1740
ggatcgccgt gcacctgtgc aatgccctgg tctgccaggt agacaacgac cacaaggagg
                                                                     1800
ccgtgggcaa gatgggcttt gtcgtgacca tgctgaagct gactcagaag aagctgctgg
                                                                     1860
acaagacatg tgaccaggtc atggagttct cctgggagtg ccctgtggaa catcacagat
                                                                     1920
gaaacteetg acaactgega gatgtteete aattteaaeg geatgaaget etteetggae
                                                                     1980
tgeetgaatg aatteecaga gaageaggaa etgeatagga atatgetagg aettttgggg
                                                                     2040
aatgtggcag aagtgaagga gctgaggcct caactaatga cttcccagtt catcagcgtc
                                                                     2100
ttcagcaacc tgttggagag caaggccgat gggatcgagg tttcctacaa tqcctqcqqc
                                                                     2160
gteeteteee acateatgtt tgatggaeee gaggeetggg gegtetgtga geeceagegt
                                                                     2220
gaggaggtgg aggaacgcat gtgggctgcc atccagagct gggacataaa ctctcggaga
                                                                     2280
aacatcaatt acaggicatt igaaccaatt cicegectee ticeceaggg aateteteet
                                                                     2340
gtcagccage actgggcaac ctgggccctg tataaceteg tgtctgtcta cccggacaag
                                                                     2400
tactgccctc tgctgatcaa agaagggggg atgccccttc tgagggacat aattaagatg
                                                                     2460
gegacegeae ggeaggagae caaggaaatg geeegeaagg tgattgagea etgeagtaae
                                                                     2520
tttaaagagg agaacatgga cacgtetaga tagaggeete egteeceatg geegeeaeeg
                                                                     2580
ctctggacca caggeggga ggaagcatge teaagcagee cagegggegg geeeetteeg
                                                                     2640
agggageete eeaeggagtg aagagaeatg ggggaetttt geacaacega egetttteet
                                                                     2700
taatggtagg gagatatata tatattatat atatattt tttttttggt taggaagtgt
                                                                     2760
gaagttttgt gtgtatgatt tetgtgeaaa aacaaaagea acaeteetga gteettgeag
                                                                     2820
ettecttgge catteteaaa eccaeteage etteateget gacacacaca etectaceee
                                                                     2880
aaccagacta aatgeetata aegetgtgag tgtecagtee ttgtecagga aacteagate
                                                                     2940
ceggeetgge tteettteat gagaggagea ggeettggae agegtatega geateetgae
                                                                     3000
```

```
ccactgcccc tqcctqaqaa cgccatctcg gctcccgggc acagctgatg gggtttqqqq
                                                                     3060
attagaactt accccactqq gtctcccaaa agccttggtg ctcccggctg tgqqccatct
                                                                     3120
ggggcaggaa agtgagccat teetaggetg aggtecagge ageeetgeee etgaagaeee
                                                                     3180
tetaggagea gggeaceeag tggeeetget getgteeage caggeetgee tgaggeeaeg
                                                                     3240
ctgctatgga ggctgcctcc tagtctccca ccaggtccca ggctgtggaa agccccagcc
                                                                     3300
cagggatggt cagaactegg gggcagatte cactgeeect tetgeeaaac acatecaqaa
                                                                     3360
cctgccctca gccctggaag ctagcatctt ctggggccag gggcttgctt cctcgctcca
                                                                     3420
tageceteaa etgeeeagge geteeeacea geagaactga geetgeetee teeteeeage
                                                                     3480
etgecceget geccagagga ecceaegeet etcagaggea gaggteccat gecageettt
                                                                     3540
gacccacaac ggccacacag ccgcctccag accagcactc ggactgccct gcagtggccg
                                                                     3600
ettgggeete cetgggeggt eeegeeetge eetaggettt acettggaag eetgagagge
                                                                     3660
geoggetete ttgeteetee ategatggac actgeattge tteteategg acaettgtgg
                                                                     3720
agegeagggg cetggggage agegetaace etggaggeag cetttgggtg atggettttt
                                                                     3780
ettecetttt cetecegegg geetgtttte aggtgtteet agcatttetg cetecaggag
                                                                     3840
gacggcaggg gtgagcagct ttgggagaga cacctggcct ttttctcctg gagcctctcc
                                                                     3900
ctcccggccc tgggaagtgg gcgca
                                                                     3925
```

```
<210> 5600
<211> 7030
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (70)...(2429)
<223> similar to gi4688902 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

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<400> 5600
gggcggccgt tcccgcggcc ccctcgcgct ttgcccaggc tccccctgcg aggccggagg
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                                                                      120
ggcagctttg gaagaagtag aaggtgatgt ggccagaaat tgggaaccta aaacttgaat
                                                                      180
aagettgtga aaetttgtat tgecaatgat tgataetgga aaageetttt gtgttgeaaa
                                                                      240
taaacagttc atgaatgggg attcgagacc tgggcttcag tattctaggt aatgatgctt
                                                                      300
gtcgttgaga ccaagtttgc cccaagtttt ctggacagtc tttcaaggaa atgataaatt
                                                                      360
ttttcacaca atcctgtttg accaaactca gagatcaatt aagggcacag cttcagaact
                                                                      420
ttgttaaaga agatettaga aaatteaaag atgecaagaa geaattegaa aaagteagtg
                                                                      480
aagaaaaaga aaatgcgtta gtaaaaaatg cccaagtaca aagaaacaaa caacatgaag
                                                                      540
ttgaagaagc caccaacatt ctgacagcaa caagaaaatg tttccgacac atagccctcg
                                                                     · 600
attatgtgct tcagattaat gttcttcaat caaaaaggag atcagaaatc ctaaaatcaa
                                                                      660
tgttgtcatt tatgtatgcc catttggcct tctttcatca aggatatgat ctgtttagtg
                                                                      720
aacttggacc ctacatgaag gatcttggtg cacagttgga tcgactggtt gtggatgcag
                                                                      780
caaaggagaa aagagaaatg gagcaaaaac attccaccat tcaacaaaag gatttctcca
                                                                      840
gtgatgattc taagttagaa tataacgtag atgctgcaaa tggcatagtt atggaaggat
                                                                      900
atctgttcaa acgagccagc aatgccttca aaacttggaa caggcgctgg ttttcaatac
                                                                      960
agaataatca gttggtttac cagaaaaaat ttaaggataa tccgactgtg gtagttgaag
                                                                     1020
acctcagget ttgcacagtg aaacattgtg aagacataga gegacgatte tgetttgagg
                                                                     1080
tggtctcgcc aacaaaagt tgcatgctcc aggcagattc cgaaaagctg cgccaggcat
                                                                     1140
ggattaaggc tgttcagacc agtatttgct actgcttata gagagaagga tgatgaatca
                                                                     1200
gagaagetgg ataagaaate atetecatee acaggaagee tagattetgg aaatgagtee
                                                                     1260
```

```
aaagagaaat tattgaaagg agaaagtgcg cttcagcggg tccagtgtat ccctggcaat
                                                                     1320
gccagctgtt gtgactgtgg cctggcagat ccacggtggg ccagcatcaa cctgggcatc
                                                                     1380
accttgtgta tcgagtgctc cggaattcac cggagccttg gggttcattt ttcaaaagta
                                                                     1440
cgatctttaa ctttagacac ctgggagcca gaacttttaa agcttatgtg tgagttgggg
                                                                     1500
aatgatgtta taaatcgagt ttatgaagct aatgtggaaa aaatgggaat aaagaaaccc
                                                                     1560
caaccaggac aaagacagga gaaggaggca tatatcagag caaaatatgt ggagaggaaa
                                                                     1620
tttgtggata aaatattcct ataatcatta tcacctccct gagcagcaaa aaaaagtttg
                                                                     1680
tetetaaaag ttetgaagaa aagaggetga geatttetaa atttggeece aggggaecaa
                                                                     1740
gtcagagcat ctgcccaaag ttcagtcaga agtaatgaca gtggaattca gcagagctct
                                                                     1800
gatgatggaa gagaatettt accetecaeg gtgteageea atagtttata tgageetgaa
                                                                     1860
ggagaaaggc aagattette tatgtttett gaetegaaac atettaatee aggaetteag
                                                                     1920
ctttataggg cgtcatatga aaaaaacctt cctaaaatgg ctgaggcttt ggctcatggt
                                                                     1980
gcagacgtga actgggccaa ttcagaggaa aacaaagcga caccacttat tcaggctgta
                                                                     2040
tragggggct ctttggtgac gtgtgagttc ctcctacaga atggtgctaa tqtcaaccaa
                                                                     2100
agagatgtcc aagggcgggg accattgcac catgccaccg tettagggca cacagggcag
                                                                     2160
gtatgtttat teetaaaaeg aggtgeeaat eaacatgeea etgatgaaga agggaaagae
                                                                     2220
cctttgagca tagctgtgga agcagccaat gctgatatag tcaccttgtt acgtttagca
                                                                     2280
agaatgaatg aagagatgcg ggaatcagaa ggactttatg gacagccagg tgatgaaact
                                                                     2340
tatcaggaca tatttcgtga tttttcccaa atggcatcca ataatccaga gaaactaaat
                                                                     2400
cgtttccagc aagattcaca gaaattctga atttttttaa aaatgggaaa\atatgcccat
                                                                     2460
ctggtgaccc cctaatgtat acagetaaaa attcacaatt tttttactge tttaatteta
                                                                     2520
cttaattttg gtagatattg aatggcttgg aaaagaggta cccattcata tatttataaa
                                                                     2580
ttaggggagt agttatctag tagtaggaga ggaacctagt ttaggacctc ttttatttaa
                                                                     2640
aaaagcctat ttaaagggct aatttctggt agacagaagt tcagtctaga tttaggccat
                                                                     2700
ctctagggtt acaagatgat aggaggttag accaaaagtg attcttttgc caatgggtgg
                                                                     2760
tggcattgat ttttttcctc catgcatctt gcccaggatc actcagtcaa gcatgtcttc
                                                                     2820
atcaagtgga agccaactgt cetgeetgee teaagaatat gtgttttett tagetteeet
                                                                     2880
gaggattttt ggtggttcag aaataggtgt gtgtgttgat gtgtfttttgg taacctagct.
                                                                     2940
ttcatacaca taatataga tttattagaa ctagagaatg tgttttcccc gtttgttcat
                                                                     3000
aaatgcggtc ggttatactt tttaggtgac aggttattgt ccagtacttt aaagtaagta
                                                                     3060
tgtataaagg ctgtacaggt agaccataat tcagtccctt agatttattt tatgcagcaa
                                                                     3120
aaaaaaagctc ttttttttt ttaatcacaa aaaaaaaccc cagttcaaaa tgtgtagttc
                                                                     3180
ttcattgttg ggttgattcc ccaaaacctt gacagatgta tcgatggaat aaaagtatgt
                                                                     3240
tttaaaggtt acttgaatgt cacaaaatta tgccttcatc aaaactttaa aggaaaaatc
                                                                     3300
aatttataaa atcatgtagg ccatttttat atttgaaatt tgtcctttta aagatagttt
                                                                     3360
tgctgttgct cctagtgaaa gaaaaatctc tgtacaaagg agaaaaagaa ccccacttat
                                                                     3420
tettagttaa taetaaaata tatageaata aattgetgtt tatttttet aeatetattt
                                                                     3480
tgtgtacttg tacacagtgt acattettt aaattatate gtgtatatag etttagtatt
                                                                     3540
cggttacatg attcacagac ccctgaattc caaaatatta tggataaaca ttaccattta
                                                                     3600
tatgctacaa attagtctga ttccatcttt gaaaatgtct taaagtataa aataattaat
                                                                     3660
ttgctttttt tttttttc ccgagatggc gtcttgctgt gtcacccagg ctggagtgca
                                                                     3720
gtggcacgat ctcagctcac tgcagcctcc tcctcttggg ttcaagcaat tctcctgcct
                                                                     3780
cageeteeeg agtagetggg actaeaggea eeegeeacea tteegageta atttetatat
                                                                     3840
ttttagtaaa gacgggtttc accattttgg ccaggttggt ctcgaactcc tgacctcagg
                                                                     3900
tgatcagect getttagect eccagagtge tgggattaca ggegtgagee accgeaceca
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gectaatttg cettttgatt cetteceatt gttgtcaaca attaagteta ttettettt
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agaaattata tgtaaatgat attattgata ctctttctaa ataagaggtt ttaaaatata
                                                                     4080
taaaaaacttt atgatccaat tatagataaa ttttctaaca tttcccagtc actagggttt
                                                                     4140
tataagttga ttaaacatca aatcagaatc tagccaagca ggaattatat tgaaataagt
                                                                     4200
tcacattaca gaaaaggttc ccataatttg gcccaaactg ccatgcatgt aatgccttat
                                                                     4260
ttagtaatgg tcactgtatg ttagataagg ataaaaatat atttgtgaat tacttctgag
                                                                     4320
gaaatgccta acttcccaca gcattgtatt taattataac aataacgagg aacattaaat
                                                                     4380
ctttatettt getgttteac etcaaagtea tagateatet ggetttttag geacetteac
                                                                     4440
taaaggcaaa aatctgattt gtagttttta ttagcatgta ccttgaaatt atttgaccaa
                                                                     4500
gaageteaaa gaaaagaagt aegttaaaga aaaagaaaaa aeeteaettt teetttatag
                                                                     4560
tgtcccttcc tgttttaatt cctaaagatc ctgactttta tctgaggaag tctaggtagt
                                                                     4620 -
tttccttttg gatctggcca ttggtgcgtg tttcattcag atcacctctg gaatctctgt
                                                                     4680
```

```
ggttgtqaaq qcaattcctt atqagactct tgcctcctgt ggcttacqtq atqaattqtt
                                                                   4740
aatatggcag taattaatta gtatctactt aaatttagtg gtcagaaatg tatttgaagt
                                                                   4800
gccttaaaga tgatcatggt tcagaatatc ttcagagaaa gcaaaatctt taatattgca
                                                                   4860
gggagcctag caatacaagt acacatttct gtggcttgat ttcttgaata tgctgagacc
                                                                   4920
4980
atagttacaa ggtaggttgg ctcttaggtg aatttagcca tgtcaactaa tagcttttat
                                                                   5040
atggtatgta acaaatctga attatgttat gctgtgaatt attcagtgca ttataagaaa
                                                                   5100
tcttagttaa tcatgctttt gggcttcatt agtcaatgtg attggccttt tattttcttt
                                                                   5160
ccataactta tctgctatta ttagtttctt attccttatt attaatctgt tagctcatta
                                                                   5220
tcattagctt actaacttga aagttagatt aatatcaaaa taagaatagc agcactatga
                                                                   5280
agagttaata aaatgcaatt tcatgttaga gctagaataa aagtaattga gcagtcattt
                                                                   5340
gcaaatgctt cattataaca tttatgtgct taagatttct aaggttttaa aaagttacct
                                                                   5400
ttaatacaat ccttagaaac tcagaaattt cctgatattc attagattat ggtgtttgcc
                                                                   5460
taatttatac eggtttteac tgtatatttt aatgaacttt gattggttac ttttecagac
                                                                   5520
atacagattt aattiggaat atgaacttig gitcitcatg agigcattii gaaaaagaaa
                                                                   5580
aaaagtacac attcagaatc tggccaattt aagtttgtat tttaaaaata ttttatqcat
                                                                   5640
gttaagtatg gtcgcagtaa atgaaattgt gtttaagact aaatttacta ccqttttqaa
                                                                   5700
cagacattee cagateatte ttatattete agataacaet tetetataat atcaetttee
                                                                   5760
atcatggaca tgagctggaa aaatgatgta tttttgtaga ttgtätgtcc agaatgactt
                                                                   5820
tagaaccgca tgatacggtg gaaggagcac tggactagtc gtcactaccc tttttggatt
                                                                   5880
cagggeteet cacaattaaa atgagtgtaa tgaaacaagg tgaaaatata gaagcateee
                                                                   5940
tttgtatact gttttgctac ttacagtgta cttggcattg ctttatctca ctggattctc
                                                                   6000
atggtaggat ttotgagato ttaatotaag otocaaagtt gtotactttt ttgatoctag
                                                                   6060
ggtgctcctt ttgttttaca gagcagggtc acttgatttg ctagctggtg gcagaattgg
                                                                   6120
caccáttace caggietgae igaccaccag teagaggeae ittatitgia teatgaaaig
                                                                   6180
atttgaaatc attgtaaagc agcgaagtct gataatgaat gccagctttc cttgtgcttt
                                                                   6240
gataacaaag actccaaata ttctggagaa cctggataaa agtttgaagg gctaqattgg
                                                                   6300
gatttgaaga caaaattgta ggaaatctta catttttgca ataacaaaca ttaatgaaag
                                                                   6360
caaaacatta täääägtäät tttäatteae cacataetta teäatttett gatgetteea
                                                                   6420
aatgacatct acagatatgg ttttgtggac atctttttct gtttacataa atttatccac
                                                                   6480
ttaaaatgtg ataatgtgga gacaaagcaa gatttgatta cataaacttt tctctqcatt
                                                                   6540
ggtettttea etatettatt tgetaaetti tettattitt etteaeette eecaeeetee
                                                                   6600
attitttgga tattaaacag ggaaagettg ctacattata aagattgttg gcaccattta
                                                                   6660
ttttacacaa aggctaaagg ttaacttttg gaaatgatga gctactttta tatatgtgtt
                                                                   6720
tactcatget tigigatati teiggateat teeagteata aagaettáti acatgtaeta
                                                                   6780
tttcttgcta cctgtgaaaa ggtatatttt aaagaatgta taaccaacag tccatttact
                                                                   6840
ttttattagt atgtagagga tttgtatcta attcatgaat gtagttttac aqtagtttgt
                                                                   6900
cattgtaaat ggagcaaagt acattatctt ctaaaatgta cattatgtaa gaattgtaaa
                                                                   6960
tatacttaag taatttgtat gccaaaaaat tacaataagt caataaagat ctcacctctg
                                                                   7020
aaaaaaaaa
                                                                   7030
```

```
<210> 5601
<211> 3734
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3319)...(252)
<223> similar to gi3451166 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5601 ggtaaaagcc agttactttt attataatga atgagaaata ctatgactgg agaagaggtt 60 tcacgtgact agattattct tggttcacac actatggtat caaaattaat tatggaaaaa 120 aaaacccaca ttggattacc cacattttta ttgagttttg actgatgata gggaaacatt 180 tacaaaggag taaatgttac gtaacttctc acggtatgta agttagaagc tgggcagcaa 240 acatggttac caagagtcgt ctagttcttc atgagaaaag cctgttaaac tttcgacttt 300 gtcactagga tggcagcggt gtccaacata ggggagcctt cttgggacca tcttttttga 360 getettgtet geeggaetee tgggtettge teetgetgga tgatttteaa tgtatttete 420 taaaggattt tcactgtgag gcagatttgt gcttttattt cttgattact catttctaat 480 teatttteea atttetaatt cettttttat tttaatette agtggattet teaateatet 540 ttaccettte etgatacagt ttttetagtt etettegtte eetttetaaa aettettgta 600 ggttactetg cettetttet tetetetgee ttegttettt caettgetgt teeegtattt 660 tttcttcttc cttttgttct tcaatttgtt tctgatctac acttgggtgc tgatatgaga 720 ggggcacagc agctgcagca gcgtccacat gagacatatc cccggcagga gaaagcccgc 780 ccatttccaa ctgccttggc atgttccctg cagattcaaa agatgattca aactcctcat 840 tatccttaaa agctagcttg tccacatctg aaaattcact tttgtcttga agttcagttt 900 gtettegata aagaceeact ttetgeteeg gagggetgga gacaggaggg atggagagge 960 tgtgcctaga ctcagtgggt gatggtaggg gcattctgtc aggacaagga ctgggggaag 1020 caatgtgtga tetgeecaga cettecagat acattteact ttegaggett etttttgett 1080 ttggaaggg tgtggaagag aggcgtctgg aggaagtgcc cccgcggagc ctcgaggctg 1140 cactgootgt cagtgoticc acgacgtcat teetttette aagtgtgeec acttgagget 1200 gctcagagac aactetgtce tetecaaaaa tatgtettte eggggaactg gaagtaatgt 1260 ttttgaagge tteeageaag tgeagagatg gtgggetett tgetgetagt gggettttgg 1320 cagagttttt aatgactete egatggtaae ttetgaaage ettttecaag egtteggeet 1380 cttgctgaag ctctttgacc cttgccttag tattggctac aaactcaagg tcagaatcag 1440 gggaactacc ctccacccat gcagttggat aatttgtgat ccttgatgca accatacgtg 1500 cctagaacgt tttcctgttt aaaaggattg ttcaagaaat cccccactta acctcaccca 1560 ttgccaaggc accacattgc ccatttaatt aatcccattg aacagaacga acggatcaca 1620 gactgccttt ggattgcagt acacttcatt ctcctagggc tgtctgagtt tgcttcagtt 1680 gcaattttaa atcggcaacc tgagtagtta aactctttac agaagctttg taacctagaa 1740 totgggcott cagotgtgca gaatgctcaa tttcgtcttg cagttgtttg tgcagagctt 1800 geetgeaget ttegaactee teatgeteaa ceactatage etfttegget tteegtagtt 1860 1920 ctttctgaaa gactgcaagt tcaggagccg gctgagctag gcggtttagg agacgcaggt tttcatttct actetettee agttgttgtt taagtaattt attttgtgee agaageteea 1980 gtttctcttc ttttagtagt gaataatcac tcatctcttt aaccttttca ttcagcatat 2040 ggttttgttt tgttattgcc aaagactggg ctttgacaga ctctaattca agctcaagtt 2100 ctttcacacg atttacagat tgattgagtt cctccttttt tgaattaata gctatgagct 2160 cctcttgcaa atggaacagc titttcttta ttcttccttt catcttcaat cagtcgatta 2220 gttctaatga tgtagtcatc cttcagttca agttgatact ttagaagttc attcttgagc 2280 tttcggtcat aggtctcctc aaaactcttt atattctgct cctgtctcct aagtgcctca 2340 gttatgettt tatgttttte tteetggage ttetggttea atteaaaaqe tteaactett 2400 tgcttcagct ctgcttctct tcctcttagc aaatccatat cttttagtaa aagttgcctt 2460 tgagcataaa tttcttttgt ttcaatctct tggtgcttgt gaattctttc aagggtactc 2520 ttttcccgaa gaacgagagc ttcagatttt gcttgacaag ctttttcaaa atcattctgg 2580 aacatggtta actectitte atactititt tittgetteea tittaattit tgetateteg 2640 gtatetttaa aaaaetteaa ettttgacae atttetgeee gaagttgete ttetatttet 2700 etettataet eatttagett tatttetaaa gattegaaet tgataegetg agggtaagea 2760 tetgeaaact gateateaat aagetgaage tteteageea gagaatetet gttaaatgte 2820 gaacttgtet gagttteeat attacaacte tetttagett gatgatatte tgecaattet 2880 tttaaaaaaa tgcataagaa aacctttttg attttcttta tcagatcctg aaaccagtga 2940 tttgtagaga ctggagtagg ggttgattta atgaagttgt aataagatcc tgcataggta 3000 atacetttte ttttgecaaa ecaetttetg gaaagaaaac agaaagtgaa tatteatage 3060 cacatetttg taagtgatet gecactaaag agttagagge geetattaag agggagetee 3120 cttctactga aatggaccga ggctgcagtt ctccactcaa tacagggtgc atcaactcat 3180 gaattagctg gtttcgaagt tgtgtcttga gtgtatccag tataccccga tccttaaacg 3240

```
totggtatag otttttgogo agttoatott gaotoaacac atcagocacg gtaaacatgt
                                                                    3300
tggactgcgc catcatcagg cqtcagctcc ctccggagcc cgcctcgctc gccccqccgc
                                                                    3360
ggcccgagtt tagtgcccag cccgggcggt ggggccaaga cgagggggaa tccctgccct
                                                                    3420
cagaaccetg cetetgteec gagggttegg gaggaacaaa ggtgetgaac gttetetgee
                                                                    3480
tegeactece aactaggttt tetageaaac aegegagett cetttetteg eggttetgag
                                                                    3540
gcaagggcga ggacccaggc acgactcaaa ggcggctgga gggcggggac ccagacacta
                                                                    3600
gggactgaag gcagcgaggc aggaccgcct cacagccagt ccggcaactt ccggaaacct
                                                                    3660
gctaaatata gccttcccga gctgaagaac tacggagcat gagcttggtt gcccagcacc
                                                                    3720
ggccggaaac gaaa
                                                                    3734
```

```
<210> 5602
<211> 1038
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (51)...(308)
<223> similar to gi1890635 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5602
ggaagtcaca getgetgagg gaccactetg etecceegee taagccatge acetetgtgg
                                                                       60
gagcaatggg ctgctgaccc agacagaccc caaggagcaa caaaggcagc tgaagaagca
                                                                      120
gaagaaccgg gcagccgccc agcgaagccg gcagaagcac acaqacaagg cagacqccct
                                                                      180
gcaccagcag cacgagtete tggaaaaaga caacetegee etgeggaagg agatecagte
                                                                      240
cctgcaggcc gagctggcgt ggtggagccg gacctgcac gtgcatgagc gcctgtgccc
                                                                      300
catggattgt geeteetget eageteeagg geteetggge tgetgggaee aqqetqaqqq
                                                                      360
geteetggge cetggeecac agggacaaca tggetgeegg gageagetgg agetgtteea
                                                                      420
gacccegggt teetgttace cageteagee geteteteca ggtecacage etcatgatte
                                                                      480
teccageete etecagtgee ecetgeeete aetgteeett ggeeeegetg tggttgetga
                                                                      540
acctectgte cagetgtece ecagecetet cetgtttgee tegeacactg gttecageet
                                                                      600
geaggggtet teetetaage teagtgeeet ceageceage eteaeggeee aaactgeeee
                                                                      660
tecacagece etegagetig ageateceae cagagggaag etigggiteet etecegacaa
                                                                      720
cccttcctct gccctggggc ttgcacgtct gcagagcagg gagcacaaac ctgctctctc
                                                                      780
ageageeact tggeaaggge tggttgtgga teecageeet caccetetee tggeetttee
                                                                      840
tetgetetee tetgeteaag: teeaetteta acetggtett eggagetggg ttggeeceet
                                                                      900
tttttggget caggaagcag cettagcaca egggeeetet ceteceteaa taatggggge
                                                                      960
tgccctgcgt ggctgaccag ctggcccaag atttcacagt cgaaaaagga agccccact
                                                                     1020
ggatgccttc ccactgtg
                                                                     1038
```

```
<210> 5603
<211> 994
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (515)...(380)
<223> similar to gi5104224 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5603
tttttttttt ttaaagttaa agattetttt attaataaat teteeeteee eteeaaacte
                                                                       60
tececaaaat aaatatetee teeeegettt ggggagttgg gggggtetgt atettaggge
                                                                      120
cagecetect agtgggecag ecceetagtg ttaaaaatag gteeetaace ecceagggtg
                                                                      180
accccqtgg tggaatttca ggacatctga gtgagtgggg cctagtgtca agtctgccc
                                                                      240
ccaagtcage ctggccccca gggcctctag gaaggagggc accccctcc cctgtgcaaa
                                                                      300
tgctgcagtt ccttagtcag tgtcagctgt tttgtgtgag ccagcgtgag gctccctttc
                                                                      360
tgttctggag ccagaggcag ggcaaccaga caccttggaa ggttcccctg aaccctgggc
                                                                      420
ccaggeetca gaggtgatte accepecce caceceett gtggttggag gagettgget
                                                                      480
ccegcegegt ctgggaggca gagactggct ctagaatgga tgaatgaatg atgagtgggc
                                                                      540
gageceegge tggcaggggg cacattgtea etggateage gecacagetg ggcagecete
                                                                      600
tecgeeggte teetetatgg gggtggtgaa ettetetete etgeggeate gteteeagae
                                                                      660
caaaaagcca gaaagcagcc ccagcacgaa ggtcaggctc agagcgcccc caaggatggg
                                                                      720
ccaaagcagc cggaaggggg caggaggtgc tgcagcgcag cccaggcaga agtcgctgtg
                                                                      780
eggtegegee etgeaagaeg egeagteeat geaettgtee aggteegege teeaggaget
                                                                      840
gccgcgggag cagggggcgg tgcctggcgc ttgctccccg gccacggagc gcagcaacgc
                                                                      900
cagccagage eccagcacga ggageegeag caaceggege agegageeee gagecatagt
                                                                      960
gcacgtcctc tcgtgccgaa ttcctcagcg cgga
                                                                      994
```

```
<210> 5604
<211> 1671
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1543)...(429)
<223> similar to gi189762 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5604
tttttttta tttttttt tcatgttaga aattccttta ttccttatca aaacaaacta
                                                                      60
acagtaaacg tatattatat gctttaattt tatacatata agttatcttg tttggataca
                                                                     120
tettteatea ggaetetgee acatecatae tttgteettg tggtgagaga ggataaaatg
                                                                     180
tgatataatt tgttattcaa agaacatggc aaccgtaaca gacaaaagga agcatggcat
                                                                     240
ctaggggagg agagtggaga gttttccata cacaaacaca tttaaacttc cctgtacaaa
                                                                     300
aatacctgct gttgctttag aaatcgtttt cctttatgaa tagtcaggtc ttgcagtaca
                                                                     360
aatccaggtg cagtgccagc aagtatttca aataaatttc aacgacttga tattcaagtc
                                                                     420
caaactaaat atttaatgtt ttctttattg caaatatgat gtctttgacc tgaggtatag
                                                                     480
agttgtcctc tagaatcttt gcataaggca tagggacatc agcaccagtg acacgaacag
                                                                     540
caggagcate caggaaaatt gaacgcagga cetteccatg ateetggcae agattteaag
                                                                     600
```

```
ctcctactcc caaactqtqq ccagcctcct tcccacagtt acaagatgaa ttttqtcttc
                                                                      660
atgacactgg gcttctatgg gtttccatgt ccattgggtc taatgggtac gcatatttat
                                                                      720
cacctcagca ttcgactcct tctttagata ggcactggct ggcaggcttc taaggcagtg
                                                                      780
ggcccacagg tcttgaatgg gaaaccacag ttatatgtgt tccgtgcatt tctattttgg
                                                                      840
cttttccaat aggaatcatg aaaatctttt gactgagctt ccggaggaaa ttcaaaaggg
                                                                      900
aaccccatac atcaattcat tctctagegc caccactgga ttgttatccc gaatggctga
                                                                      960
tttaataagt cctttagcat cctacgaagt cctagggact gaccaccttt aagcctgggc
                                                                     1020
agtgcccata ccaggcagca aagcactgtg agtgctgggc agctacacct gctgaagcac
                                                                     1080
caattgggcc cccatgatac tataagcaca ggctgaaggc caaccagaac atgtagtagg
                                                                     1140
tettggeage tgagtttata acctggteaa atggettgee atggagaaat tgaaggteea
                                                                     1200
taaattcaac aaaatgggcc gcaaacccca gccaatagct gcacctacaa gcaattccca
                                                                     1260
agcaaagccc atctctgata tgggagtgtc aaataatcct cttgtctcca tatttcttcc
                                                                     1320
acageceteg actaacettg tatgececat catagetggg caacttette tecaageaga
                                                                     1380
aatacettet catetette cageteetea tecataceet gatttatage atcacgaact
                                                                     1440
gtcaacctgc acggcagccg gcgcggtcca gtgaaagcgc ctcttcagca gcccagagac
                                                                     1500
etcccgaagg ggtetccgca ccaagccaga caccgccgcc atcttggtcg tgtcctctat
                                                                     1560
cegetgecaa acgaececag aggggeegge agaegtgage acgeeegeet ecaeeggege
                                                                     1620
gggcaatggc aaggcgcgcc ggctgcgtga cccgcccacc cgcccaccgg t
                                                                     1671
```

```
<210> 5605
<211> 3670
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3671)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (197)...(2288)
<223> similar to gi5834572 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5605
tttcgtggag aaacccggcc cccagaagat tgtgggtgta gtggccacag ccttacaggc
                                                                       60
aggcaggggt ggttggtgtc aacagggggg ccaacagggt accagagcca agaccctcgg
                                                                      120
cetectecce egeogeette etgeagatet gettggettt gaggaagagt ggeagtactg
                                                                      180
cctcactgca taagggatgg gatcagagaa cagtgcttta aagagctata cactgagaga
                                                                      240
accadeattt acettaceet etggaettge tgtttateee gétgtactge aagatggeaa
                                                                      300
atttgcttca gtttttgtgt ataagagaga aaatgaagac aaggttaata aagctgccaa
                                                                      360
ggtaccataa tagcattiga agacacticg tcaccctige tigctaagat tittatctig
                                                                      420
tactgtggaa gcggatggca ttcatcttgt cactgagcga gtacagcccc tggaagtggc
                                                                      480
tttggaaaca ttgtcttctg cagaggtctg tgctgggatc tatgacatat tgctggctct
                                                                      540
tatcttcctt catgacagag gacacctaac acacaataat gtctgtttat catctgtgtt
                                                                      600
tgtgagtgaa gatggacact ggaagctagg aggaatggaa actgtttgta aagtttctca
                                                                      660
ggccacacca gagtttctga ggagtattca gtcaataaga gacccagcat ctatcctcc
                                                                      720
tgaagagatg tetecagaat teacaactet eccagagtgt catggacatg eccgggatge
                                                                      780
cttttcattt ggaacattgg tggaaagttt gctcacaatc ttaaatgaac aggtttcagc
                                                                      840
```

```
ggatqttctc tccagctttc aacaqacctt gcactcaact ttgctgaatc ccattccaaa
                                                                      900
atggcggcca gcgctctgca ccttactatc tcatgacttc ttcagaaatg attttctqqa
                                                                      960
agttgtgaat ttcttgaaaa gtttaacatt gaagagtgaa gaggagaaaa cggaattctt
                                                                     1020
taaatttetg etggacagag teagetgett gteagaggaa ttgatagett eaaqqttqqt
                                                                     1080
geotettetg ettaateagt tggtgtttge agageeagtg getgtttaag agttttette
                                                                     1140
cttatctgct tggccccaaa aaagatcatg cgcagggaga aactccttgc ttgctctcac
                                                                     1200
cagecetgtt ccagteacgg gtgateceeg tgetteteea gttgtttgaa gtteatqaaq
                                                                     1260
agcatgtgcg gatggtgctg ctgtctcaca tcgaggccta cgtgggagca ctttcactca
                                                                     1320
gggagcagct gaagaaagtt catcttggcc acaggtttta ctggggcctg cgtgatnact
                                                                     1380
agegatteca ttgtggcaat tactetgcat agectageag tgetggtete tetgettqqa
                                                                     1440
ccagaggtgg ttgtgggagg agaacgaacc aagatettca aacgcactge ccccaagttt
                                                                     1500
tactaaaaaa tactgacett tetetagaag gegateeatt tteteageet attaaattte
                                                                     1560
ccataaatgg actctcagat gtaaaaaata cttcggagga cagtgaaaac ttcccatcaa
                                                                     1620
gttctaaaaa gtctgaggag tggcctgact ggagtggacc tgagggagcc tgaaaatcaa
                                                                     1680
actgtcaaca taccagattt ggccctagag aacctttgtg atgatgtcaa gtcccaqtqc
                                                                     1740
actacettgg atgtggaaga gteatettgg gatgaetgeg ageecageag ettaqataet
                                                                     1800
aaagtaaacc caggaggtgg aatcactgct acaaaacctg ttacctcagg ggagcagaag
                                                                     1860
cetattectg etttgettte acteactgaa gagtetatge ettggaaate aagettacce
                                                                     1920
caaaagatta geettgtaca aaggggggat gaegeagace aaategagee geeaaaagtg
                                                                     1980
tcatcacaag aaaggcccct taaggttcca tcagaacttg gtttaggaga ggaattcacc
                                                                     2040
attcaagtaa aaaagaagcc agtaaaagat cetgagatèg attggtttge tgatatgate
                                                                     2100
ccagaaatta agccttctgc tgcttttctt atattacctg aactgaggac agaaatggtc
                                                                     2160
ccaaaaaagg atgatgtctc cccagtgatg cagttttcct caaaatttgc tgcagcagaa
                                                                     2220
attactgagg gagaggctga aggctgggaa gaagaagggg agctgaactg ggaagataat
                                                                     2280
aactggtgac aatagatgtg agttaaactt taggaaaaag gattcccttt ttttaaaaaa
                                                                     2340
aatcaatacc tcaaaagcag gctttgggac aagaaaaccc caaagtggcc tgcttttccc
                                                                     2400
atcccaggag ctcattatcc agtctgtgcc aactgaagta ggagactgac tgtgagtgct
                                                                     2460
ggctaaaagc cctgggtggt gaggctcaca gtactggttt ccagggagga agaqcctttq
                                                                     2520
tgcatttgac tgaggccagt ttctatggaa gagccaagta ggcttgaggg agagggtccg
aatttacctg cctttttccc cgggacaatt ccgggaagta aagaaaatgt aattccaaqc
                                                                     2640
ctggttagcc ttaattttgt gcccattctt ttctttaaca taagagtaag ctctattatg
                                                                     2700
aaatacaact tttaaaaaat tttagcctat aaattatata aatgatttta aattgctgag
                                                                     2760
gtttccttag gcagcttatt tatttgttta cagttagact atctqaqtaa atqqttcttt
                                                                     2820
gtggacctag gcagttcctg actgttccac atgtagtaca ttgtaccaaa gttcttaata
                                                                     2880
agaatattcc ccacaatcct gttctctaaa tgtcaaataa agattatttt cactagattc
                                                                     2940
aactttacaa aatttgtttt atatctgtta gaaaatgtac agacataagt attttcagtt
                                                                     3000
gacaaagcat caaacccagt totgootagt gataagttto accotagagt atgtatgtaa
                                                                     3060
egittiaget tatecateet tietiggage geeteeatit eealigaaag eeaggetgga
                                                                     3120
gcaggaccct tttggagtag tgactcagtt gcttccaaag cccctgtcta ttgtatgcag
                                                                     3180
cgctgaccat gtactcttct tcccaggggg aactcctgac gagctcttat tgcataaggc
                                                                     3240
tgtaaagatg acctctatgc ttcttctaca gtcacattag gcaaagggtt cccaggaaaa
                                                                     3300
tacctttttt cctgtttcac acgttccact ttgggcagct ttcagtttca tctacaaacc
                                                                     3360
cagtettete cagaaaggat acaactttgt tettagttte tteagaactg agacactgtg
                                                                     3420
gaactatete tteatgattt gtteeeteag egaactgagt aaaegeetee aaggtatgtt
                                                                     3480
gttctagcag ccaactcctg tcagctagca gtaaggcaaa catacaggac aggttgggca
                                                                     3540
gaattetgte etggataget teaggtataa aaagttttea taaagaagat acaaaateea
                                                                     3600
acattgccta acgaacatag tcaggaagct ctaatttaag tagcgaggtc tgcaaagtta
                                                                     3660
cctcgtgccg
                                                                     3670
```

<210> 5606

<211> 1774

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1279)...(1756)
<223> similar to gi804764 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5606
agaaaccccc accccttctc cgtgtctcta ctcttttctc tgggcttgct ccttcactat
                                                                       60
                                                                      120
gggcaagett ccacetteca tteetttett eteeettage atgtattett cagaaettaa
aatotottoa attotoacot gacotaaaat otaagoatot tattitotto igoaatgotg
                                                                      180
                                                                      240
cttgacccca atataaactc gacaggagtt ccaaatagcc agaaaatggc acattcaatt
tttccatect acaagateta aataattett gtegtaaaat ggeaaatggt etgaggtgee
                                                                      300
tgaagtccag gcattctttt acacatcagt cccttcctag tctctgtgcc cagtgcaact
                                                                      360
egteceaaat etteettett teeeteeege etgteeeete agteeeaaee eeaagegtea
                                                                      420
etgagtettt etaatettee tittetaeag acceatetga eeteteeet eetecetggg
                                                                      480
etgeteeteg ceaggeegag etaggteeea attetteete ageetetget eetecaeeet
                                                                      540
ataatcettt tateacetee ceteeteaca eetggteegg tttacagttt egtteegtga
                                                                      600
ctagecetee eccacetgee cageaattta etettaaaaa ggtggetgga gecaaaggea
                                                                      660
tagtcaaggt taatgeteet ttttetttat ceeaaateag atagegttta ggetettttt
                                                                      720
catcagatat aaaaatccag cocagticat ggotogtttg gcagcaaccc tgagacgott
                                                                      780
tacagocota gacoctaaaa ggtcaaaagg coatottatt otcaatatac attttattac
                                                                      840
ccaatctgct cccgacatta aataaaactc caaaaattaa attccggccc tcaaacccca
                                                                      900
caacaggatt taattaacct cgccttcaag gtgtacaata atagagtaga ggcagccaag
                                                                      960
tágcaatgtá tttotgágtt gcaattoott gootócaotg tgágacááac codágcoáða
                                                                     1020.
tetecageae acaagaaett ecaaaegeet gaaccaeagt tgecaggggt teetecagaa
                                                                     1080
ctteeteec caggaacttg ctacacatge eggaaatetg gecactggge caaggaatge
                                                                    -1200
ccgcagcccg ggattcctcc taaaccgtgt cccatctgtg tgggacccca ctggaaactg
gačtytecaa etcacetyge agecaetece agageceety gaactetyge acaaggetet
                                                                     1260
ctgattgact ccttcccaga tcttcttggc ttagcggctg aagactgatg ctgccggatc
                                                                     1320
geeteggaag eeeegtagae cateaeggat geegagettt aggtaactet eaeggtggag
                                                                     1380
ggtaagteeg teecettett aateaataeg gaggetaeee acteeaeatt acettetttt
                                                                     1440
caagggeetg ttteeettge etecataact gttgtaggta ttgaeggeea ggettetaaa
                                                                     1500
cotottaaaa otooccaacg totggtgoca acattagaca atacgtogtt ttaagcacto
                                                                     1560
ctttttagtt atccccatcg tgccaggttc ccttattagg ctgaggacac tttäactaaa
                                                                     1620
ttatetgett ceetgactat teetggacta eagetgtate teattgecae cettetteee
                                                                     1680
aatocaaago otoottigig tootootott giatacocca acttaaccca caagiataag
                                                                     1740
atatetetae teceteettg acgaccgatt catg
                                                                     1774
```

```
<210> 5607
<211> 4178
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4135)...(1038)
<223> similar to gi4240251 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5607 tttttttttt ccgctcagat attttatttg tgtttgtctt tttcttttt tggtgggggg 60 aaggggacag gttggaaggg agacagaaaa acaaaatcaa agaggagaaa aaaaacatga 120 ctcttcccac cctccaccac ccctggcccc aggcctgagt caatgagggt gaggatgagc 180 acacacagcg ggcgaacagc aataacttag gggaggagcg ccaggagaac acagagtgac 240 tgctggactc cacagctgag gaggctgcct gtctagaggt ccgaagggct gggcctgggg 300 taagtgagca aactgaggaa ggtgggtgaa aagagaggac taggggactg gagaaacttc 360 actgagtcgt gggagataaa gtgctcaatg ctctagattt gggctggaag ggctggagtc 420 agctacetee aggggggeag ggeeegggae tggegggtge gtgaeeteeg eeeggetaga 480 gtccctggca gtggctggcg ggaggcaggg ggccctagct ggcgctggct gcgtggtagt 540 agccggggga ttcgggtggg ccgttcaccc cgaagcaggc cccagctggc cagtgtgtgg 600 atggcccacg ggggcaagtg ggatgctaaa ccctggctgg cccgtgccag acgccagttc 660 cagocottgo acaggacoca gaccottgoc aacagagota atgggtgttg ggtggtgcgg 720 ggattacgcc gccggggccc agggacggcc aggcggctgc ggaagccatc cttgttggtt 780 ttggggtaca gtgcaaacag accceggtcc cccacagccc cacagccctg cagggcccgg 840 aaggccatgg gtgacaggcg cagcagaacc cgcaaccaga gtcgagatat gccccggcgc 900 acceggggge cetgetgeeg cacceatetg ecceegetg ceatageeae cagaggtaga 960 gctaggcctg gccaagctaa gagccaggca gctccaaggc ccaggggaac acccatgagg 1020 1080 ceteggegee ageteaggee caggaeggee cecagtgegg taccetggge caggagtagg aaaagactgg agggcaggtg cagggctgta caaaggagca ggtaggaggc ccccagaccc 1140 accageecea ceteaaggge eageageget geetgeagge caececeace etgggetgee 1200 agcaatggaa gcagcagcag cagcaggagg ggcaggaggc cagaggagga ccccactgca 1260 1320 ggcctcaggt gtgttggagg gggttcagga gggatgtcgg gggaaggaca accatctcca 1380 ggatccctag gggtcccaat cggagccccc tettectett ettectect etcagggacg 1440 ggagtcagtg ctgggccctg gacccagcca agetcaaact ceteatecag aagactetea 1500 tecteettee eccaeaaget ceaegteeca gesteeteet ggecaacaat geteetetee 1560 tggggtacaa gggagggcac cctaagctcc tctatctcct caggcagacc ccaaacttcc 1620 teateaacea ggeteceatg tttttgtgga etgggaetag gggeteetga ttetteeece 1680 agaateetet getgettggg etecaaagtg geceetteet tteecagaat eettetetet 1740 ccaactgett ceteeteete gecaageatt etttggteca ggaetgeete etggeeaggt 1800 gagcagggct gctgttctat aggggtgcct gtgttgggtg ggcccagagc cccaggaatg 1860 gggagtggaa ggcccggggg gcgctggcct gcacgtactt tgaggctctt gggctgctg 1920 cgaacctggg ccgcatgett ctgccgcaac tettgetcac gccgettgtt gtactccage. 1980 tggttgccca gctccgtctg gtgctgcagg cgggtgagct cagcccgcgt gcgctgcagc 204Ó geettggage tgeegeaget ceageteeeg egtggeeteg tgetgeegaa geageagtge 2100 acactecaag teettetggg tetgettett gtteaggtee teeegeagea ggteetggte 2160 caggetgtge egagecagea acatettgeg ettgtaetgg egacaetgea geteaaagta 2220 etggegetge egeegeagea geeetgette etceteegee tggeaetget ggagetgete 2280 ettetgeege ageageeact eggeettete eegettggga gtgetggggt teteetqqaq 2340 etecteette agetgtteet tgegaagttt gtaggteege ttetgtgeet eeageaggge 2400 agccagetee ttettetget geccaaggat gtgetgetgg aactteeget eeteggeetg 2460 ggcagctcgt gcctccttct cacctatggc ctggtgccgc cgggccagct tttctgcctc 2520 tgccccaaag ccagcccgct gcgcctcaag ctcccgctgc agccgtgcac tgtgctcctc 2580 ccgttcaccc ctcagccgtg actccagggc cagcagctgc ttctggtgct gtcgtcgcat 2640 ccgcttatag ccgctcagct gctcccgcag cgcagagtcc tgctcatgct cctggatctg 2700 acggctgacc agggaggcgg ttcggatggt ggcaaagtgg tctcggttac ggcagtaggc 2760 ccggcggcgg gcggaagagg tggtggaagt gggagctggg gctgcaggcg gctggagagg 2820 gctgggggtt atctctggct ggtaggggtc atcatatagg ttgtcagagc ccggcagccg 2880 gtggataatg gagctgtgag aggtgactgt gtgctccccc tcctgcatca tggccatctc 2940 cogggettea gggeettett ectecteete etetteetee teeteeteet ectetteete 3000 gttgtctgag gcatctgcta ggctgttgac ggagctgctc tggctggagg cgctgatgga 3060 catgctgggc actgagtggc tactctcgag gctggtcaga gtcccggccc ggtgcatgta 3120 gggctcggcc tectetteet cetetggggc etcggcacca gggccgttgg gtgcctettg

3180

```
gaacaggate ttetteatet tgeggtaetg caggttgtee ageteeegea eggeateett
                                                                     3240
ggtcctctgg atcaggtcca tgatgactgt gggtggccgc tcccggagca caaagcggtg
                                                                     3300
cttcaggaga acctctgagg ttggtctgtc ttgagggatt ttctgaagac aggagtcgac
                                                                     3360
aaaattccgg aagtactcag accagtgtcc tgactggagc acgggggatt cgttctgtgc
                                                                     3420
aatgtggtat aaggcactca tcgcattcat gttaaagagc ggtggtttcc gttcagccag
                                                                     3480
ctcgatgcag gttatcccca aggaccagac gtccactttg ccatcgtact gcccctcatc
                                                                     3540
catggccagg atcacctcgg gtgccatcca gtatggggtg cccaccgaag aagttggcag
                                                                     3600
gtgccatgat ggacgcagaa ccaaagtccc ctagcttcac taaccctggc tctgacagca
                                                                     3660
ggatgtttcc agccttcaca tccctatgga tcatgttgtg ggagtgcaga tatgccaggc
                                                                     3720
cctgaagcgc cccgtgggtc acagctgcga tctctacctc ctgaaggggt ttcttgtgca
                                                                     3780
ettetagaag gteagaaget gageeeagge aataeteeat taeeageeaa geegtgtget
                                                                     3840
ccctcaggta acagccccgg tactgaatgg tgttgggatg ccggagcttc tgtaagaacc
                                                                     3900
gcacctcctt gatgatgtct tgccatttct cattggactg cttcccactg taggacatct
                                                                     3960
tettgatgge caccacetea etatteegga cateeeggge aaagtataeg getecaaage
                                                                     4020
tgccatggcc aatttcccgg aggtcagaga agagcttttc tgggtcatcc ttgaagaaga
                                                                     4080
getcagecae atetgggtee tteaggetee eggeeeggee eecagetgge atggtggeee
                                                                     4140
ctgggggccc tgagagtggg gcctggcccc aactgttt
                                                                     4178
```

```
<210> 5608
<211> 1010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1011)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (113)...(255)
<223> similar to gi1537015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5608
ggcacgagag gggggatcgc tgggagcggt tgcggcgtgc ggggagctga gttatagctg
                                                                       60
tgacttctgc cctgccaggc cgcacacaag ctggctgacc cggtttgtaa aaatggaatt
                                                                      120
tcaagcagta gtgatggcag taggtggagg atctcggatg acagacctaa cttccagcat
                                                                      180
tcccaaacct ctgcttccag ttgggaacaa acctttaatt tggtacccat tgaacctgct
                                                                      240
tgagcgtgtt ggatttgaag aagtcattgt ggttacaacc agggatgttc aaaaggctct
                                                                      300
atgtgcagaa ttcaagatga aaatgaagcc agatattgtg tgtattcctg atgacgctga
                                                                      360
catgggaact gcagattett tgcgctacat atatccaaaa cttaagacag atgtgctggt
                                                                      420
gctgagctgt gatctgataa cagacgttgc cttacatgag gttgtggacc tgtttagagc
                                                                      480
ttatgatgca tcacttgcta tgttgatgag aaaaggccaa gatagcatag aacctgttcc
                                                                      540
cggtcaaaag gggaaaaaaa aagcagtgga gcagcgtgac ttcattggag tggacagcac
                                                                      600
aggaaagagg ctgctcttca tggctaatga agcagacttg gatgaagagc tggtcattaa
                                                                      660
gggatccatc ctacagaagc atcctagaat acgtttccac acgggtcttg tggatgccca
                                                                      720
cctctactgt ttgaaaaaat acatcgtgga tttcctaatg gaaaatgggg tcaataactt
                                                                      780
ctatccggag tgaacttgat tccatattta gttgaggaaa acagttttcc tcagcttcct
                                                                      840
cacaacaggg gacaaggaag gaaaaaggg gagggtctaa aggaaaaagg ggcttgaagt
                                                                      900
```

960 1010

<210> 5609
<211> 2189
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (50)...(2003)
<223> similar to gi4680647 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5609

ctcccaggtg cgcgcttcgc tcccggagcc gcggaactcg gcggccgcca tggcgtccaa 60 catggaccgg gagatgatcc tggcggattt tcaggcatgt actggcattg aaaacattga 120 cgaagctátt acattgcttg aacaaaataa ttgggactta gtggcagcta tcaatggtgt 180 aataccacag gaaaatggca ttctacaaag tgaatatgga ggtgagacca taccaggacc 240 tgcatttaat cccagcaagt catccagctt cagctcccta ctccctcctt cctcccttcc 300 agegtttega cetgtaatge ceacecaggg cagattgtag gaaagggeaa ceteggatge 360 tggatttcag ggttgaatac agagacagaa atgttgatgt ggtacttgaa gacacctgta 420 ctgttggaga gattaaacag attctagaaa atgaacttca gatacctgtg tccaaaatgc 480 tgttaaaagg ctggaagacg ggagatgtgg aagacagtac ggtcctaaaa tctctacact 540 tgccaaaaaa caacagtett tatgteetta caccagattt gecaccacet teatcateta 600 gtcatgctgg tgccctgcag gagtcattaa atcaaaactt catgctgatc atcacccacc 660 gagaagtcca gcgggagtac aacctgaact tctcaggaag cagtactatt caagaggtaa 720 agagaaatgt gtatgacctt acaagtatcc cegttegeca ccaattatgg gagggetgge 780 caacttetge tacagacgae teaatgtgte ttgetgaate agggetetet tatecetgee 840 atcgacttac agtgggaaga agatcttcac ctgcacagac ccgggaacag tcggaagaac 900 aaatcaccga tgttcatatg gttagtgata gcgatggaga tgactttgaa gatgctacag 960 aatttggggt ggatgatgga gaagtatttg gcatggcgtc atctgccttg agaaaatctc 1020 caatgatgcc agaaaacgca gaaaatgaag gagatgcctt attacaattt acagcagagt 1080 tttcttcaag atatggtgat tgccatcctg tattttttat tggctcatta gaagctgctt 1140 ttcaagagge ettetatgtg aaageeegag atagaaaget tettgetate taceteeace 1200 atgatgaaag tgtgttaacc aacgtgttet geteacaaat getttgtget gaatecattg 1260 tttcttatct gagtcaaaat tttataacct gggcttggga tctgacaaag gactccaaca 1320 gagcaagatt teteactatg tgeaatagac actttggeag tgttgtggea caaaccatte 1380 ggactcaaaa aacggatcag tttccgcttt tcctgattat tatgggaaag cgatcatcta 1440 atgaagtgtt gaatgtgata caagggaaca caacagtaga tgagttaatg atgagactca 1500 tggctgcaat ggagatette acageccaac aacaggaaga tataaaggac gaggatgaac 1560 gtgaagccag agaaaatgtg aagagagagc aagatgaggc ctatcgcctt tcacttgagg 1620 ctgacagagc aaagagggaa gctcacgaga gagagatggc agaacagttt cgtttggagc 1680 agattegeaa agaacaagaa gaggaaegtg aggecateeg getgteetta gageaageee 1740 tgeeteetga geettaggaa gaaaatgetg ageetgtgag caaactgegg atceggaeee 1800 ccagtggcga gttcttggag cgggggttcc tggccagcaa caagctccag attgtctttg 1860 attttgtagc ttccaagagg attttccatg ggatgagtac aagttactga gcacctttcc 1920 ttaggagaga cgtaactcaa ctggacccaa ataaatccat tattgggagg taaagttgtt 1980 cccttcaaga aacccttttc ccttggaagc caaaagagta aacacgggcc cagcggtgga 2040 acceaecett tettggccaa gecageaage tgeggtegga agaagggtte ttegecaaec 2100

```
<210> 5610
<211> 3446
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (201)...(2368)
<223> similar to gi4321664 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5610 acccaactga attoccgggt cgacgatttc gtggcggaat tccagaagag aaaataatcc 60 ctgtctagat gcagaggact tggttcctat tccagtgctc ctccggtagc agggaggcga 120 cagaaggtgt ccaactatcc attaccaaga agaaatctat tcgtttgagc ctgagacact 180 ctttgaggta aaaaattaga atgaaagaac ctttggatgg tgaatgtggc aaagcagtgg 240 taccacagca ggagettetg gacaaaatta aagaagaacc agacaatget caagagtatg 300 gatgtgtcca acagccaaaa actcaagaaa gtaaattgaa aattggtggt gtgtcttcag 360 ttaatgagag acctattgcc cagcagttga acccaggett teagetttet tttgcateat 420 ctggcccaag tgtgttgctt ccttcagttc cagetgttgc tattaaggtt ttttgttctg 480 gttgtaaaaa aatgctttat aagggccaaa ctgcatatca taaqacaqqa tctactcaqc 540 tettetgete cacacgatge atcaccagae attetteace tgeetgeetg ceaceteete 600 ccaagaaaac ctgcacaaac tgctcgaaag acattttaaa tcctaaggat gtgatcacaa 660 ctcgctttga gaattectat cctagcaaag atttctgcag ccaatcatgc ttgtcatctt 720 atgagctaaa gaaaaaacct gttgttacca tatataccaa aagcatttca actaagtgca 780 gtatgtgtca gaagaatgct gatactcgat ttgaagttaa atatcaaaat gtggtacatg 840 gtctttgtag tgatgcctgt ttttcaaaat ttcactctac aaacaacctc accatgaact 900 gttgtgagaa ctgtgggagc tattgctata gtagctctgg tccttgccaa tcccagaagg 960 tttttagttc aacaagtgtc acggcataca agcagaattc tgcccaaatt cctccatatg 1020 ccctggggaa gtcattgagg ccctcagctg aaatgattga gactacaaat gattcaggaa 1080 aaacagaget tttetgetet attaattget tatetgetta cagagttaag aetgttaett 1140 cttcaggtgt ccaggtttca tgtcatagtt gtaaaacctc agcaatccct cagtatcacc 1200 tagccatgtc aaatggaact atatacagct totgcagetc cagttgtgtg gttgctttcc 1260 agaatgtatt tagcaagcca aaaggaacaa acctettegg teggtgeege tgtteteagg 1320 gcctaagtgg ttgttaagcc cgccctcctc cagggtcagc agtgtcaata qqqaqqaqqt 1380 aacacetetg cegitteece cagetecate egiggetetg etgeageeaq cetecaacet 1440 cttggtgaac aatcccagca agttgcttta acccatacag ttgttaaact caagtgtcag 1500 cactgtaacc atctatttgc cacaaaacca gaacttcttt tttacaaggg taaaatgttt 1560 ctgttttgtg gcaagaattg ctctgatgaa tacaagaaga aaaataaagt tgtggcaatg 1620 tgtgactact gtaaactgca gaaaattata aaggagactg tgcgattctc aggggttgat 1680 aagccattct gtagtgaagt ttgcaaattc ctctctgccc gtgactttgg agaacgatgg 1740 ggaaactact gtaagatgtg cagctactgt tcacagacat ccccaaattt ggtaaaaaaa 1800 togatgggag ggcaagtaag aagagttttg ttgtgaagat tgtatgtcca aattaacagt 1860 totgttttat cagatggcca agtgtgatgg ttgtaaacga cagggtaaac taagcgagtc 1920 cataaagtgg cgaggcaaca ttaaacattt ctgtaaccta ttttgtgtct tggagttttg 1980 tcatcagcaa attatgaatg actgtcttcc acaaaataaa gtaaatattt ctaaagcaaa 2040 aactgctgtg acggagctcc cttctgcaag gacagataca acaccagtta taaccagtgt 2100

```
gatgtcattg gcaaaaatac ctgctacctt atctacaggg aacactaaca gtgttttaaa
                                                                     2160
aggtgcagtt actaaagagg cagcaaagat cattcaagat gaaagtacac aggaagatgc
                                                                     2220
tatgaaattt ccatcttccc aatcttccca gccttccagg cttttaaaga acaaaggcat
                                                                     2280
atcatgcaaa cccgtcacac agaccaaggc cacttcttgc aaaccacata cacagcacaa
                                                                     2340
agaatgtcag acagatttac ctatgcctaa tgaaaaaaat gatgcagaac ttgattctcc
                                                                     2400
accttcaaag aaaaaaagat taggtttttt ccagacttat gatacagaat atttaaaagt
                                                                     2460
tggttttatt atctgtcctg gatcaaaaga aagttcacca aggccacagt gtgtcatttg
                                                                     2520
tggagagate ttatecagtg aaaacatgaa gecageaaat ettteteate atttgaagae
                                                                     2580
aaaacattca gaattagaaa acaaaccagt agattttttt gaacaaaaat ctttagaaat
                                                                     2640
ggaatgtcaa aatagttett taaaaaagtg tttactagtt gaaaagteae ttgtgaaage
                                                                     2700
ttottattta attgotttoo aaactgotgo aagcaagaag coattotooa ttgotgaaga
                                                                     2760
attaattaaa ccatatttag tagaaatgtg ttcagaagtt ttgggttcaa gtgctggaga
                                                                     2820
caaaatgaaa actattccac tttctaatgt tacaattcaa cacaggattg atgaactatc
                                                                     2880
tgcagacatt gaagaccage tgattcaaaa ggtcagagag tcaaagtggt ttgcccttca
                                                                     2940
gatagatgag tcatcagaaa tctcaaatat cacacttctt ttgtgctata ttcgtttcat
                                                                     3000
tgattatgat tgtcgtgatg taaaagaaga attattattt tgcattgaaa tgcctactca.
                                                                     3060
aataactggc tttgaaatat ttgaactaat aaataaatat attgatagta aatctctgaa
                                                                     3120
ttggaaacat tgtgttggtc tctgtaccga tggggctgca agcatgactg qcaqqtattc
                                                                     3180
tggtttaaaa gcaaaaattc aagaagttgc catgaataca gcggcattta cacattgttt
                                                                     3240
tattcaccgt gaacgtttag tggcagaaaa gttgtctcca tgtttacata aaattctttt
                                                                     3300
gcagtcagca caaattttaa gttttataaa gagcaatgca ttaaattcac gtatgttaac
                                                                     3360
aattttgtgt gaagagatgg gatctgagca tgtgagttta ccgcttcatg ctgaagtacg
                                                                     3420
ttggatatca agagggagaa tgttaa
                                                                     3446
```

```
<210> 5611
<211> 2531
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (997)...(2355)
<223> similar to gi3874427 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5611
aatgaaattg aaaaacaatt gaatgccatc agagataata tcaaaattgg agaagatcgt
                                                                       60
gctgctagac ttgacaggaa aatggaagaa cagcaggtca gacttaatga ggcagaacaa
                                                                      120
aagtacaagg atattcaaga caaactagaa aagattagtg aagagacaaa tgcacgagca
                                                                      180
ccagaatgta tggcattgaa agcagatgtt gttgctaaga aaagggccta taatgaagct
                                                                      240
gaggttttat ataaccgatc cttaaacgaa tataaagcat taaagaaaga tgatgagcag
                                                                      300
ctttgtaaac gaattgaaga gctgaaaaaa agtactgacc aatctttgga acctgaacgg
                                                                      360
ttggaaagac aaaaaaaat atcttggtta aaagagagag taaaggcctt tcaaaatcaa
                                                                      420
gaaaattcag tcaatcaaga gatcgaacag tttcagcaag ccatagaaaa ggacaaagaa
                                                                      480
gaacatggca aaattaagag agaagaatta gatgtgaagc atgcactgag ctacaatcag
                                                                      540
gggcaactga aagaattgaa agatagtaaa actgatcgac tcaaaagatt tggccctaat
                                                                      600
gttccagctc ttcttgaagc catagatgat gcttatagac aaggacattt tacctataaa
                                                                      660
cctgtaggcc ctttaggagc ttgcattcat cttcgggacc cagaacttgc tttggctatt
                                                                      720
gaatcttgct taaaagggct tctgcaggcc tattgttgcc ataatcatgc tgatgaaagg
                                                                      780
gtccttcagg cactcatgaa aaggttttat ttaccatgga cctcacggcc accgataata
                                                                      840
```

```
gtttctgaqt gtcggaatga gatatatgat gtaagacaca gagctgctta tcatccagac
                                                                      900
tttccaacaq ttctgacaqc tttagaaata gataatgcgg ttgcggcaaa tagcctaatt
                                                                      960
gacatqaqaq qcataqaqac aqtgctacta atcaaaaata attctgtagc tcgtgcagta
                                                                     1020
atgcagtccc aaaagccacc caaaaattgt agagaagctt ttactgctga tggtgatcaa
                                                                     1080
gtttttgcag gacgttatta ttcatctgaa aatacaagac ctaagttcct aagcagagat
                                                                     1140
qtqqattctq aaataaqtqa cttqqaqaat qaggttgaaa ataagacggc ccagatatta
                                                                     1200
aatetteage aacatttate tgeeettgaa aaagatatta aacacaatga ggaacttett
                                                                     1260
aaaaggtgcc aactacatta taaagaacta aagatgaaaa taagaaaaaa tatttctgaa
                                                                     1320
attegggaac ttgagaacat agaagaacac cagtetgtag atattgcaac tttggaagat
                                                                     1380
gaagctcagg aaaataaaag caaaatgaaa atggttgagg aacatatgga gcaacaaaaa
                                                                     1440
gaaaatatgg agcatcttaa aagtctgaaa atagaagcag aaaataagta tgatgcaatt
                                                                     1500
aaattcaaaa ttaatcaact atcggagcta gcagacccac ttaaggatga attaaacctt
                                                                     1560
gctgattctg aagtggataa ccaaaaacga gggaaacgac attatgaaga aaaacaaaaa
                                                                     1620
gaacacttgg ataccttaaa taaaaagaaa cgagaactgg atatgaaaga gaaagaacta
                                                                     1680
gaggagaaaa tgtcacaagc aagacaaatc tgcccagagc gtatagaagt agaaaaatct
                                                                     1740
gcatcaattc tggacaaaga aattaatcga ttaaggcaga agatacaggc agaacatgct
                                                                     1800
agtcatggag atcgagagga aataatgagg cagtaccaag aagcaagaga gacctatctt
                                                                     1860
gatctggata gtaaagtgag gactttaaaa aagtttatta aattactggg agaaatcatg
                                                                     1920
qaqcacaqat tcaaqacata tcaacaattt aqaaqqtqtt tqactttacq atqcaaatta
                                                                     1980
tactttgaca acttactatc tcagcgggcc tattgtggaa aaatgaattt tgaccacaag
                                                                     2040
aatgaaactc taagtatatc agttcagcct ggagaaggaa ataaagctgc tttcaatgac
                                                                     2100
atgagageet tgtetggagg tgaacgttet ttetecadag tgtgttttat tetttecetg
                                                                     2160
tggtccatcg cagaatctcc tttcagatgc ctggatgaat ttgatgtcta catggatatg
                                                                     2220
gttaatagga gaattgccat ggacttgata ctgaagatgg cagattccca gcgttttaga
                                                                     2280
cagtttatet tgetcacace tcaaagcatg agttcactte catecagtaa actgataaga
                                                                     2340
attctccgaa tgtctgatcc tgaaagagga caaactacat tgcctttcag acctgtgact
                                                                     2400
caagaagaag atgatgacca aaggtgattt gtaacttaac atgccttgtc ctgatgttga
                                                                     2460
aggatttgtg aagggaaaaa aaattctgga ctctttgata taataaaatg agactggagg
                                                                     2520
cattctgaaa a
                                                                     2531
```

```
<210> 5612
<211> 2161
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2102)...(1410)
<223> similar to gi1730284 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5612
agogtagtot acactgotgt ttattcaaac aatoccotat taatgaatat ttggattgac
                                                                       60
tetaatetge tittaaaaaa taaceatgga tacaattigt aettaataee iggaagitaa
                                                                      120
aaaaactggc actgtcattc tcttgatcac tctcctgatc ctctgacttc ttgaattccc
                                                                      180
attteeteaa etgtaaaaca aggaatttta atatgaetta eetateeggg ttaaataaaa
                                                                      240
ttgcaattca aaaagtattc ccatatatgt taagaaaaac tgaaatagcc actaaaatgc
                                                                      300
attcaaaata aataaattat ataattatca ctacacagat tcaccataca actcatttct
                                                                      360
acttaagaga ttcatataga cacaatgaca aaatagattg tgtccacaga aagatcgaga
                                                                      420
gtgaaatttc cagaaactat cttagatgaa ataattgaag aattcaggtt aaatatttat
                                                                      480
```

```
tgaacaaatg cagagtaaat gaactaaggg ctgttataac cttaagttac aacaaacaac
                                                                      540
ttcaaatatt cagagggctg tcacacagag aatgaaagac ttgctcagta tttctccaaa
                                                                      600
gggcagaact tgagccaagg gataaatata agcaaccaat gggctgcagg atagttgtac
                                                                      660
aaagtgtatc atgtatcttc atagcttctt tgcccatata atgcattcca cacttaagtt
                                                                      720
teteetteta aaaggegaca geacaagtta atatgtetea taaatgtett aaataagttg
                                                                      780
cattttcatg gcaagccctc cactgccagc aatggatata ctcacactat tggaaaaaat
                                                                      840
ctaaagttaa caaactggtt tagtatggaa atggtctatt tgttcctcag ctatgtttct
                                                                      900
gtatettaca ttagtggete teaggaggtg gggggtgaaa agagageatg ttetecaaaq
                                                                      960
agggtgaatc ataatcccca gtgattcaga tactgtgcct ggggacaatc tttcttcaag
                                                                     1020
tocaaatgaa toattataat tatoaaccaa tggtacatat aagagtacgg catgfgctgg
                                                                     1080
gacagagaaa agacagttga caaacactat tctacatgaa acaggaaatc ttattttatg
                                                                     1140
agtcactaga aaactaactg taatactgac aggctccatc cagattatta aatactacaa
                                                                     1200
aatgagaact gtttcaacaa ctattcagca taacgtttat ggacaaaatg tatatagtat
                                                                     1260
atcttatatt ctatatgtat tttatcacat agtaaggaat gctgaggtgc ttaagccatc
                                                                     1320
caataaattg aaaatacaaa ctttacattt ctacgtttgt cagtatacag gattctgaag
                                                                     1380
atgaatcttg aactcagagt gataaatcag ttttcaagga aagccacata atccgtcagt
                                                                     1440
ctggctaact gctgttcatt gggtattggg ggaactggag caggctctga taagggaata
                                                                     1500
aacttgttaa aggaaacatc cagggcccct gcaactggct ttctgggcag aaccattctt
                                                                     1560
gtggtggaat cagcttgcca tccttgttct aatatgcctt tcacagcctc ttctacagga
                                                                     1620
agtccaacaa aggctgcaaa atcatcggcg atgattgaag tatacgcttg agagaccagg
                                                                     1680
gcaaaggege gteteettgt tgeateteta agtgetteea taattggetg gaeegtetea.
                                                                     1740
gaccactggt gagcgttgat ggttgtatag atcccaggga aatctctctg ccagattctt
                                                                     1800
tgtcctactg accaaattcc cccaagttca gaatttgcag attttatagc aggtggtatt
                                                                     1860
cttttccaaa gatatcttgc attattcatg tcattatgga gcaaatataa aqctaqaaqc
                                                                     1920
tgaccataca ctgggggtgt agcaatteet ècaggggeta ttataagaaa caaattegae
                                                                     1980
agatteetga ageattetga ttetgeeeat taeateaage gteetegage teetggttet
                                                                     2040
egeactgate cageaacttt ttgaaactaa aggegettte egecateace gecactggea
                                                                     2100
tettegegge eggeetegee getgeacegt eeggacaaac aaaaaceage eeacgegtee
                                                                     2160
                                                                     2161
```

```
<210> 5613
<211> 2293
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2155)...(1087)
<223> similar to gi210699 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5613
cccgaggaag gctagactgt taagtgtcac gtatatacgg tctcaatgga gcctcaggaa
                                                                       60
gctattaaac aacctcaaat cacaaaatca gaaaagtgtt gaacatttag aggaagaata
                                                                      120
gaaaggaaaa aaaagcctcc aagttgtgta ttatttgtca gtaaagcaaa acaaatgtgt
                                                                      180
aagcccactt atatttaata atgtctcact gaaattaaag taatagggga gagtctgaag
                                                                      240
tttccacaga taaagagagt gctgtactca aatttactac aaaattaata atagtaaatg
                                                                      300
taaaatatgt atttatacag cettttgcag acttatgaac tatetcaaat teacqaatec
                                                                      360
tattttttaa atacagtttt aagtttcaac cacttgtatc accagaattt tgagacttaa
                                                                      420
ctcccatggt taagagattt ccaagctgtg ttcacacctg tagtcccagc tacactgaaa
                                                                      480
```

```
gctaaggcgg gaggaccaca tgagcccagg agttccagac tagccttgct ctatttaaag
                                                                    540
agcaagacte cactgecaaa aaaaaaaagg aaaaccaaaa aaaaaaatte cataaataac
                                                                    600
tgggtttcta aaattccatc ttttcagtga aacagtacat cacttaaggc taaaactatg
                                                                    660
tettttatea etgtaagtee eeagtaetge ttacaceeta cacagagtag atgeteaata
                                                                    720
aatgtttgat gatttggcaa ttaatgggat aggagggaat attaatatgt gtcaataaat
                                                                    780
tactctgaat attataaata ggcttatgag tatggaaaag acccaccctc aaggaatttq
                                                                    840
tgatetttte tettacatea taetgetgtt tteaatatge eataattttt ettttettea
                                                                    900
gggtggggtc agggaaacaa cacaaaatag ctgtggatgc tgtttaacaa tcagcatttc
                                                                    960
ataagcagtt aagaatttct gtactttcac aaaaatgaaa aaatctctct aaagattatg
                                                                   1020
tgagcccaat ctatgcccaa atctttttt ttttttaat atagagaact gattatgttc
                                                                   1080
acttgtaacc tgtcattcca aaattcttca ggatgtttaa tgttcaagtg tccatattcc
                                                                   1140
cagteceact ggatgeetgg caggatgeaa ceatetgaat gagtggaagt ataatgtttg
                                                                   1200
caccaggtat tatattagga gccttgaacc cagaatatgt ctgattaagt cttttagccc
                                                                   1260
aataatttgc cactgctgcc aagtctggta attttgaagg agaaagttca accataacgg
                                                                   1320
ggtgatacag ggcacccccg tactcaaaaa aactttcaaa gtgctttcta aacaagtttc
                                                                   1380
totttotoot tgaatacaac gtoagtoaca actgatggca gtacaatoga tocatocata
                                                                   1440
cactgeteta agaacatett gatggtataa tatgetgtea tteatgetet acetgetaet
                                                                   1500
agtitaatti ggicaagtag cicittccci ggagactcaa attctactag actcaaattc
                                                                   1560
tattagacca aagacaaatg atctcaacca tggtcttcac ttaaaccaat cactggccct
                                                                   1620
gcattataac tgagcaacaa gttggcacaa tcaccatgtg ttggttgctg gagagctatc
                                                                   1680
atcagggtct tgaattgctt ctgaacctgg agactgctgg cacggattct gtcacttgac
                                                                   1740
1800
caagaatgta aattgcggat cettecettt gtggetttgg ceatacagea ttttagtttt
                                                                   1860
gttctttcca ttaactgaag tcacgaggta tgcctccttg gaaactccaa cagttaagag
                                                                   1920
attotoatgt attocatgaa ataaaaagca aagaaaaato aaacttgtot taatqaqatq
                                                                   1980
gaagtgttgg atcaaacact gattgagctg ttctatgtcc tccacttccc cagtgcctgg
                                                                   2040
atgtggttca totgcatoga tggatactgt ocaaatttgo cacttggoto aaaagactgo
                                                                   2100
tgcccagtga atggtaatgc agatagaggc tcagaggtat ccatgggttc ctccatgatg
                                                                   2160
aacaatggtc ttgattgctg aagcgattgt ttctgattgg ttcctatgcc cagatctgta
                                                                   2220
ceteccacet tgggaggetg agggaggata gettgagece aagtgtteaa agttgacagt
                                                                   2280
gagctatgat cac
                                                                   2293
```

```
<210> 5614
<211> 1378
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (167)...(1165)
<223> similar to gi4200234 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5614
gtcgggcctc ctccagtaag aagcgtgggc gagtagtggt gtcgccagtg gcaactgaag 60
ggagtaatgg agataaaca aaagcgaagg cgaagttaaa gcactccacg agttccctcg
gattaaacgc cggagagagc gtgaatttgc ctcggggacg cctctccagg aatgtcggat 180
tgcacatcct attgtaaaat gtacttactg cagatcagaa tttcaacaag agagcaaaac 240
taacacaatt ttgtaagaag tgtgctcaaa atgtgaagca atttggggac ggccaagcct 300
ttttcagtac tgtaacataa tttcagcatt ttttggtacc aagtgtcagc gttgcacaaa 360
```

```
ttcaqaaaaa aagtatqqac cacctcagac ctgtgaacag tgcaaacagc aatgtgcttt
                                                                      420
tgatcqqaaq gaggaaqqaa gaagaaaggt tgatggaaag ttattatgct ggctctgtac
                                                                      480
tttatcgtac aaaagagttt tacagaagac gaaagaacaa aggaagagcc tgggatcttc
                                                                      540
acattcaaat tcatcttctt catctcttac tgagaaagac cagcatcatc caaaacatca
                                                                      600
tcaccaccat catcaccatc accatcgtca cagcagtagc catcacaaaa tcagcaatct
                                                                      660
aaqtccagaa gaagagcaqq gactgtggaa acagagccat aaatcctctg caacaattca
                                                                      720
gaatgaaact ccaaagaaaa agcccaaatt ggaatctaag ccatctaatg gagataggtg
                                                                      780
tatgtaatgt gtgccattag taaggtaatt tgccagttgc atccatttct gtcagtagct
                                                                      840
ctataaatca gtcagcagat agtgggggaa cagacaattt tgtccttata agtcaactga
                                                                      900
aagaagaagt gatgteactt aagegtetet taeageagag agaecagaed attttagaaa
                                                                      960
aagataaaaa gttaactgaa ctaaaggcag actttcagta ccaagagtca aatttgagaa
                                                                     1020
caadaatgad cagtatggaa aaagcccaca aagaaactgt ggaacaactt caggccadaa
                                                                     1080
acagagaact actcaaacag gtcgcagcat tatcaaaggg taaaaaattt gacaaaagtg
                                                                     1140
gaagcatact aacateteet tgagaaagte atttgtttag catttettet tacaatgtaa
                                                                     1200
atttggggaa aaaaaattct gtgaagccct taaattctgt gtagtagaaa aatatttttg
                                                                     1260
cacaccaaat gaattggtgt gtttcctgtt cacttttgta attgatatac agcatttttt
                                                                     1320
aagitgtaaa acattcaaat aaaacttcaa ctggtttgaa gtaacttttt aattaaaa
                                                                     1378
```

```
<210> 5615
<211> 2473
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (94)...(1892)
<223> similar to gi3047308 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5615
cccacgegte egeaaggage taaggeette agtgteeeet teettaeeea ggttteteae
                                                                       60
agaatggatt cccageggga acttgcagag gaactgegge tttaccaate caccettett
                                                                     120
caggatggtc taaaagatct cctggatgag aaaaaattca tcgattgcac cctaaaagca
                                                                      180
ggtgacaaaa gtottocttg coacagattg attitgtcag citigtagtcc ttacttccgt
                                                                      240
gagtactttt tatctgaaat tgatgaggcg aaaaaaaagg aggtagtgct agacaatgtg
                                                                      300
gatectgeta taettgattt aateateaaa taeetgtaet etgeeagtat tgateteaat
                                                                     360
gacggaaatg tgcaagatat ittigcatig gccagccgct ticagaiccc cicagigtit
                                                                     420
actigection the teagaaaaga cttgeteetg graaactige tagecatect
                                                                     480
aagattagga ettettettg aetgeeegag aetegeeatt tetggeeegt gaatttgegt
                                                                      540
ctgatcgctt tgtacagatt tgtaaggaag aggactttat gcaactggtc tccacaggaa
                                                                     600
ctgatctcag tcatttcaaa tgacagccta aatgtagaaa aaggaagaag cagtatttga
                                                                     660
gggcagtgat gaaatgggtg cggaacagac aaggaaaaca gggttaaaaa cctttagtgg
                                                                     720
aagtgtttgg attgtatccg ttttcgcctt atgacagaaa aatattttaa ggatcatgtt
                                                                     780
gagaaagatg atataattaa aagcaaccca gacctccaga aaaaaatcaa agttctaaaa
                                                                     840
gatgettteg caggeaaact cecagaacet ageaaaaatg cegegaagae tggggetggt
                                                                     900
gaggtgaatg gtgatgttgg tgatgaagat ttacttcctg gttacctgaa tgacattccc
                                                                     960
aggcatggaa tgtttgtaaa agacctcatc ctcttggtta atgacacagc agcagtggct
                                                                    1020
tatgacccca cggaaaatga atgctacctt actgcactgg ctgagcagat tcccagaaat
                                                                    1080
catticcagca tigitaccca gcaaaatcag atatatgtgg taggaggact atatgtggat
                                                                    1140
gaagaaaata aggatcaacc tetacagtca tacttettee agetegatag catageatet
                                                                    1200
```

```
gaatgggttg gacttecace tetgeettea geeaggtgte tetteggtet gggagaggtg
                                                                  1260
gatgataaaa totatgtagt tgcaggcaaa gaccttcaaa cagaggcttc gctggattca
                                                                  1320
gtattatgct atgatcctgt ggctgcaaaa tggaacgaag taaaaaaact ccctatcaaa
                                                                  1380
gtctatggcc ataatgtgat ttcacataaa gggatgatat attgtctagg aggaaagaca
                                                                  1440
gatgacaaaa aatgtacaaa cagggtgttt atcttcaacc ccaaaaaagg agattggaaa
                                                                  1500
gatetggete caatgaaaat teetegttee atgtttggag tagcagteea taaaggeaaa
                                                                  1560
attgtgattg caggaggtgt cactgaagat ggtctttcag cttcagttga agcttttgac 🖟
                                                                  1620
ettacaacaa ataaatggga tgtaatgace gaattteece aagaaagaag etecateagt
                                                                  1680
ttggtcagcc tggctggatc tctgtatgca attggtggtt ttgctatgat tcaactggag
                                                                  1740
tctaaagaat ttgcacccac tgaagtcaat gacatatgga agtatgaaga tgataaaaaa
                                                                  1800
gaatgggctg ggatgttgaa ggaaatacgt tatgcttcag gagctagttg cctagcaaca
                                                                  1860
cgittaaatc tõitcaaact gictaaactg igaacaaggi gacaaaacat aatagatigg
                                                                  1920
gaggtggttt gtttggtgaa tggggcttta atttattctg ttttttaaaa gcttgtacag
                                                                  1980
acactcatgt agaaattatt caagaagtta ttgtctaaga gatgagcagt aggtaagaaa
                                                                  2040 -
acctcagtca ttgactcttc aatgtaatga tcagagttta aaaccatttt ctaataataa
                                                                  2100
attaaatett cagttgaaca aattattttg tgaatetgtt teaeteaatg gattgtaaag
                                                                  2160
2220
aactgatttt ctattacaat tggaagtgga gaatatgtgc atctacacta aaaaaatgtt
                                                                  2280
taagatatca aaaacetete etegtgette aaaatgacag gaateetgtg cattatacta
                                                                  2340
agaattacat gccataagat gactgacttc agaaatccta citcagaagt gtaataaatg
                                                                  2400
gatgaggaaa tegtttgatg gggaaaagte tettgtaagt aaaagtagte aaatteaaat
                                                                  2460
ggcaaaaaaa aaa
                                                                  2473
```

```
<210> 5616
<211> 1894
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1895)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (51)...(689)
<223> similar to gi5566244 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5616
cctcctgaga gttcgccggc ccgggcccaa tgggnttgtt ccaaggggtc atgcagaaat
                                                                      60
acagcagcag cttgttcaag acctcccagc tggcgcctgc ggaccccttg ataaaggcca
                                                                      120
tcaaggatgg cgactgaaga ggccttgaag accatgatca aggaagggaa gaatctcgca
                                                                      180
gageceaaca aggaggetg getgeegetg caegaggeeg catactatgg ecaggtggge
                                                                      240
tgcctgaaag tcctgcagcg agcgtaccca agggaccatc gaccagcgca ccctgcagga
                                                                      300
ggaaacaage egittactit ggeaacgige agggggcane itggactgie teetgicact
                                                                      360
gctccaagca ggggcagagc cggacatctc caacaaatcc cgagagacac cgctctacaa
                                                                      420
agcetgtgag egeaagaaeg eggaggeegt gaagattett ggtgeageae aaegeagaea
                                                                      480
ccaaccaccg ctgcaaccgc ggctggaccg ctctgcacga gtctgtgtct cgcaatgacc
                                                                      540
tggaggtcat gcagatcctg gtgagcggag gagccaaggt ggaatccaag aatgcctacg
                                                                      600
```

```
gcacaccett gttcgtggcc gcccagagtg gacagttgga ggccttgagg ttcttagcca
                                                                      660
agtacggggc tgacatcaac acgcaggcca gcgacaacgc gtctgccctc tacgaggcct
                                                                      720
gcaagaatga gcatgaggag gtggtggagt ttctgctgtc acagggtgcc gacgccaaca
                                                                      780
agaccaacaa ggacggcttg ctcccgctgc acatcgcctc caagaagggc aactacagga
                                                                      840
tegtgeagat getgetgeeg gtgaccagee geacgegeat acgeegtage ggegteagte
                                                                      900
cgctgcacct ggcggccgag cgcaaccacg acgaggtgct ggaggcgctg ctgagcgcgc
                                                                      960
gettegaegt gaacaegeeg etggegeeeg agegegege cetetaegaa gaeeggegea
                                                                     1020
geteegeget gtaettegeg gtggteaaca acaacgtgta egecacegag etgetgetge
                                                                     1080
aacacggege cgaccccaac cgcgacgtca tcagcccctt gctcgtggcc atccgccacg
                                                                     1140
gctgcctgcg cacaatgcag ctgctgctgg accacggcgc gaacatcgac gcctatatcg
                                                                     1200
ccacgcaccc caccgccttc cccgccacca tcatgttcgc catgaagtgc ctgtcgctgc
                                                                     1260
tcaagttcct catggacctg ggctgcgacg gcgagccctg cttctcatgc ctctacggca
                                                                     1320
acggcccgca cccgccggcc ccgcagccct ccagcaggtt caacgacgcg cccgcggccg
                                                                     1380
acaaggagcc cagcgtggtg cagttctgtg agttcgtatc tgccccagag gtgagccgct
                                                                     1440
gggcggggcc catcategat gtcctcctgg actacgtggg caacgtgcag ctctgctcgc
                                                                     1500
ggctgaagga acacatcgac agctttgagg actgggccgt catcaaggag aagaaccact
                                                                     1560
tgttctggaa aactcaccac ttgacttcag agctttctct ccaaagacta agatgaagac
                                                                     1620
gtggcccaag gtagggggta gggggggcct gggtcttgga gggctttgtt aagtattaat
                                                                     1680
ataataaatg ttacacatgt gaaaaaaaaa aaaaaggggg ggccgtttta aagaatcaag
                                                                     1740
ttttatttcc gggggctggc aaggtaaaat tttttttttg gggcccccaa aatcaatttc
                                                                     1800
egggeeeggg ttttaacaac gtegggaggg gaaaaceeeg ggggtteeee atttaatteg
                                                                     1860
cttggagcaa aannnnnnn ggtggannat tcag
                                                                     1894
```

```
<210> 5617
<211> 2699
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2700)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (452)...(1230)
<223> similar to gi5912212 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5617
gtttteteca catggaaact tattggeget tgeeteaega gacagaaceg tgagaetetg
                                                                       60
gattcctgat aagagaggaa aattctcaga atttaaagct catacagctc cagttcgaag
                                                                      120
tggagacttt tcacctgatg gccagtttct agctacagct tctgaagaca aatccataat
                                                                      180
agtatggagc atgtatcgcc agcgettect gtatteettg gategacata cacactgggt
                                                                      240
acgctgtgcc caatttncac ccgatggaag actaattgtg tcatgtagtg aggataaaac
                                                                      300
tattaaaatt tgggatacca caaataagca atgtgttaat aacttctcag attccgttgg
                                                                      360
atttgcaaat tttgtggact ttaaccctag tggtacatgc atagcttcag caggttctga
                                                                      420
tcaaactgtg aaagtctggg atgtaagagt gaacaaatta ctacagcatt accaagttca
                                                                      480
cagcggtgga gttaattgca tatcattcca tccttcgggt aactatctca tcacagcttc
                                                                      540
ttcagatggt accettaaga ttctggacct ettaaaagga aggeteatet atacaettea
                                                                      600
```

```
aggacatacg ggacctgtct ttactgtttc attttcaaaa ggtggagagc tatttgcatc
                                                                      660
aggaggtgca gacacacagg tettattatg gaggactaac tttgatgaat tgcattgtaa
                                                                      720
aggictiace aaaagaaate teaaaagati acattitgat teaceaceae atetictiga
                                                                      780
tatctaccca agaacaccac atccccatga ggaaaaagtt gagactgtag aagatttttt
                                                                      840
tottcatott ttgagattaa tocaaagott gaggtaatog atttgcagat ototactoco
                                                                      900
                                                                      960
cctgttatgg atatcctttc ttttgattct accacaacaa cagaaaccag tggtaggact
ctgccagaca agggtgaaga ggcctgtgga tatttcttga acccttcctt aatgtcacca
                                                                     1020
gaatgtttgc caacaaccac gaaaaagaaa acagaagaca tgagtgacct cccctqtqaa
                                                                     1080
agteaaagga geatacetet egetgtgaet gatgetttag ageatattat ggaacaaete
                                                                     1140
aatgttttga cacagactgt ttcaatcttg gagcagcgac tgactttgac agaggataag 🕐
                                                                     1200
ctgaaagact gccttgaaaa tcagcaaaag cttttcagtg ctgtccaaca gaaaagctga
                                                                     1260
ataaaaaatt cattttcatt tgttgggcag aggcccaata aatgaacaaa tgtacataca
                                                                     1320
ctcaggaagg tagtacaaga tactccatac aacacaacca tgtgctattt atcatqqcat
                                                                     1380
ttottaaaag ggtgagcaac agaacaaaag gcagaaaagg catacctaag qactaattta
                                                                     1440
aacacatatc aatgtgaagg actaatttaa attactatca tttatgattg cagtaataaa
                                                                     1500
gtgataagca ttcaagcaac tctgtatttt ccccatatta ttttaaatgt ccattttcat
                                                                     1560
ttataggcca aatcctgcca ggaaagtaac cagatctctg gatttcactg ttaagtcatt
tcagattgac catattcaga cagtcatggg gtgaaataat tcacttacct ccaaaatagc
                                                                     1680
atcctatatg ccaataatga gttattgatc tgactagttg tatgtctttc tgttcaaaat
                                                                     1740
agaaattatc ctttcttact aatgccttga aagaatgaac aaataaaaat tcccagacca
                                                                     1800
cagaatttcc acagcaagaa tacacttatt ttaattaaca ataqcacaga tataqcataq
                                                                     1860
ggcagtgggt tttttagtta atttatggcg tactttgttt atccattggc caacctgaag
                                                                     1920
gaaatgaaac tcacctatct ttctatcaca gatgaatgtg ctagatgaat gatttgggtt
                                                                     1980
gtatctgatc atggttcaca aaaattatgt tagtgtgttt tcagtatgct aaaaaqtcag
                                                                     2040
agtgatacaa aagtgatatt taaaaatata cacacatgta tgtacacatg cttcagaaat
                                                                     2100
attgttgctt agggtgattt gggcagctaa atagtaagta ctttttaaaa tttttgcatc
                                                                     2160
atcatettee tatttaatga attgtgattt aaaacaaaat gaaaataage caggtattet
                                                                     2220
aaaagatcct ggatacaaat taagaatttt gctttatttt aaaccaaatt gagattaaat
                                                                     2280
tgaagaaaag caagcaaatt aatttcagct tgattatcaa cctgtatcaa gaacaaaaat
                                                                     2340
gggaggaggt gtccacattt atggtgtgta taggtaacat ggggaaaatg ctattctqtq
                                                                     2400
ttttggaaaa gaagaaatag tgccgtccta tttatttcta tatttagaaa tttttctcaa
                                                                     2460
agaaatttca attgtatcta tgagatgggt ttctaagtat cttattgtgt gttataagtg
                                                                     2520
ccttttaata tcatactaag tgtgagcttc tggacatttt caaqagctta caaaaactaa
                                                                     2580
gtggcattgt attittataa ccccattgag aagactaagt aagaaatgaa atgtcctatc
                                                                     2640
aattttattt tgtcatgctt caaacaataa agacatttct gctttaaaag aaaaaaaaa
                                                                     2699
```

```
<210> 5618
<211> 1607
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1309)...(472)
<223> similar to gill50426 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5618
ttaaagaaaa tactttatta tgtcatgaaa aaaaaggcct caaccaacta gattcatact 60
tgatttgaaa aaaaatgga aaatttatta attagacagt atgtgggcat cctgttccac 120
```

```
atgggaatga qaagatgcta taggttctct aagtattgca cagtctgaaa aaataacaaa
                                                                      180
aaaagggaag qggaggaaaa aaaaaatcac atgatattgg gaaccatctc acattatqaa
                                                                      240
taatctacca agaaacattt aaaaaagaaa accctttgtt tctacagtag ctttaagttt
                                                                      300
atagttettg gaatgaetgt attecattga agacatetea gtaacaggaa getgttttag
                                                                      360
caatcccatg tgcaaatatt aataaaaaat atataaaata atgcaattca tctcttqcct
                                                                      420
tcaccccggc aatcatgaca tttctgagaa ctgttttgct tgaaaatggg ttaagctgta
                                                                      480
agttttgcct gaagctccat ctctgcagcc cgtttgagtg caacatccac tagaagctga
                                                                      540
aatccactga agtcctggtt gaggtccggt ggagtagggg gaggagtgtt gaaaagacca
                                                                      600
etetgtgtat tegtaettgg tecagateta caagtgteee tetgggtaae atgaaaagag
                                                                      660
gtgtcctgtg aaagtttttg gcccgcctat ctgcctgtaa tatctgtgtt ttgtcccac
                                                                      720
accgaccgac tggcagagag agaaagggac aatctttcaa tggcagtcac agtggtatgg
                                                                      780
cagatcactg atggacgagc caaaactgat ccccagggat gaccggctta ggagacagtg
                                                                      840
gccctcccta gggttgggtt ttggccccag ctgtacagga atgaaatggg gtctcctcta
                                                                      900
gagctggcat gaagtttttg atgcccatca cggactccac agagctcgtt tcagaaatct
                                                                      960
tggccccacg gcgggaaatt gtgaactgat ttggatcttt gccatccttt ctcagcatgt
                                                                     1020
cagggaggag cctgcggcgg gcgttgatga accagttaca gacctgtagc gtagacaggt
                                                                     1080
gtgtttgctg ggacagcaac gctttttctt gctctgaagg ataggcattg taacqqtqct
                                                                     1140
catacageca atecegaaga atetecacag acteettggg taggttgeee etteteette
                                                                     1200
tettgeetga gecageggat gaagaaaggt ccaagggaat gtecatgetg teeteateet
                                                                     1260
cagteteact gecagatget geaacaatae etttettgee ttteattetg gateteeect
                                                                     1320
cccagcgcga ggcaaggcgg gggtctggag gggccaggag cggggacaca ggggataagc
                                                                     1380
gaacgtetee tteacageeg actetecegt aacttgtagg acgtgeteca geegttattg
                                                                     1440
ctaaacagga cgctctgatc ccaggcgccc gctccttggg tggaattcaa gtgacacttg
                                                                     1500
ggetteetee egeegggate ttetggeage eggeeggggg eteteeeteg eccaactete
                                                                     1560
tecectecee teteegetee titgiteeet geteetgete ggegeae
                                                                     1607
```

```
<210> 5619
<211> 1529
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1519)...(728)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5619
ctgtattgtg caaatccact gaatatgttt gttagttcca gtactatttt ggttgagtct
                                                                       60
gtgattttct acacagaagg tcatgtcgtc tacaaacaaa tgtaatttta cttctttctt
                                                                      120
tetgatttgg atgagtttga tttettttge tatttaattg etetggetag gacaggeagt
                                                                      180
attgattgaa tagaaggggt gagagcattc ttgcatcatg tgagatcgta caggaaagca
                                                                      240
ttccattttc cctgcttggt tatttactca tttgtcattt catggatgtt ctttctattg
                                                                      300
ttgaggtaaa tttccttttc tattttgttt aggatttcta tgatgactgg attttgaatt
                                                                      360
ttgtggaacg ctttttctcc atctactaag gtgatgtggt tttaatcttt cattctgttc
                                                                      420
tagtggtata taacattgat ttgcttgaat atgttgaacc atccttgcat cccagaaata
                                                                      480
actggcactt gaatatctac attitittaa tatcctcttg aatacagtit tctaggacaa
                                                                      540
gggatcttca agaagttctg gaaaaataca tattatgaga aaattgtgca tgaatttcac
                                                                      600
aatttttgca ccaaaataaa ctagtgctag tctgttataa catgtctgaa caggctctag
                                                                      660
tttgatgccc tcaaaaggat aagacatgag tataaaaaga gactccatca aagcaatata
                                                                      720
```

```
aattotgatg aaattgaaac aagaagaaac attaaattta tgatgagacc agatgcagtg
                                                                       780
gctcaggcct gtaatcccag cattttcaga ggctgagaca ggtgggccac atgagcccag
                                                                       840
gtattcaaga ccagcctggg aaacgtgggg aaatcccctt ttctacaaaa aatacaaaaa
                                                                       900
ttagctgggc atggtggcac atacctgccg tctcagttat tgtgaagtct gtgcagggag
                                                                       960
gatggcatga acctgggagg tcaagattgc agtgagctat gatcatgcca ctgcactcca
                                                                      1020
gcatgggtga tggagagaga tactgtctta aaaaaagaat acttgtggta acgtttgggt
                                                                      1080
agaggaataa tgaaatcatt gatgctttat aaaaaggtta tggggacaat gcccaaaaga
                                                                      1140
aataaacagt ttgtaaacgg ataacttatt ttgagttagg gcaagacaat gttgacagtg
                                                                      1200
atgcatgaag cagcaggcag accttccaca tcatttttac agaaaaaaaa attaatcttg
                                                                      1260
ttcatgctgc aatgaagagg actgacagca aacagcagaa acatagtcag aatttagaga
                                                                      1320
acagcctggt taacatggtg aaacaccatc tctagtaaaa atacaaaaat tagctcagca
                                                                      1380
tggtggcatg cgcctgtaat cccagctact caggaggctg aggcagggga atctcttgaa
                                                                      1440
cccaggaggt ggaggatgca gtgaactgag atggcaacat tacactctag cctgagcaac
                                                                      1500
aagagcaaaa ctccatctca aaaaaaaaa
                                                                      1529
```

```
<210> 5620
<211> 4494
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4482)...(3139)
<223> similar to gi4240263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5620
ttttttttt ttgaagtttt tgctataaaa catttaatgt taacctacaa tacaatgtaa
                                                                       6.0
actittatga aaaaaattta aagtacacta gatttcttca gtaaattatc acatgactat
                                                                      120
teaggegeag tacaagttgg ggeaetgeat cetttgtgga tggattteeg ttgetgtgtt
                                                                      180
cctcacaagt cctaaaaaaa ccagttgtag agcggagctc cttgttcaag caccggataa
                                                                      240
tgatgcccct gattttgcat tctgggggtt atcgctcctt ctcagtcatt ttctgaaact
                                                                      300
etttgettgg cettggcace attagcaatt tteacaactg etcaattgaa ggttetaggt
                                                                      360.
tetttttage ttagttttta agagacaagt gttateetet ggeeatetet tatteaaata
                                                                      420
tcatggtgga ggcaagcaag gagaaagaag tatttgctag aggaaattct gcagaagtgg
                                                                      480
aagaaaagac cagaagggct ccactgaggg tacaaatatt caactgactc caatcgagtg
                                                                      540
tettigettg gicacticee atggitatic ageteaatet acaacticag tegigggagt
                                                                      600
gcagaacaaa acttgaaaca agtgctttta gttgatgatt tgccatttgg aaacaacagc
                                                                      660
tgaaatatcc cagaggtgat gtggaaacaa gagcaaatgc ttgcagatca ctggcttctc
                                                                      720
agtgtettet ecetegeagg teteateaaa ateceaaaag teettaggag taacacagat
                                                                      780
tgtactggca ttaagtgaca aaatgtgcag cctgtatttg actgaggagg aaaggaaatg
                                                                      840
gcacctaggc agcagcgcta gggtcagcaa ggagaccggc ctagggtctc agtaaagcag
                                                                      900
aactgtttca aatgggacta gaccggggca tgtgcttccg gtgaatcctc ttgaaaccta
                                                                     960
aagtaaatgg gaaggccgcc ctaacagttg tactgacata aagggagacc cttcttaata
                                                                     1020
ttctggcagc tgacttcctt cactgaacaa ctattatcaa aaggcgagag gcataaagtg
                                                                     1080
cacactgtag aataagaaga gactgaatta tgatggaaaa aaaaaatcgt aacttcccca
                                                                     1140
aagaggtgtg gacagtgtac ctagcctcac aaaggtcctt aataccctcc tgtgtgctgc
                                                                     1200
cagggaacag ctgtgaattc cagatgggga ggaaggctct gacttaagtg gaaaaattcc
                                                                     1260
tetgeatggt tgteageagg aaggttteae gtaaggttat cettatgtgg agaacatggg
                                                                     1320
ttatcctgct gttcacgcca gatacatttt attgacaaca gtcagatggt gattccactc
                                                                     1380
```

```
atctggcctt gggacagcag aaaacgaagt ggaagaacaa tagctggcca gggacagaat
                                                                     1440
taaattttcc tagagatggt gttctagaca gctatgccaa ggccactggg aatttctcag
                                                                     1500
gctctccaag ttaatttctg tggggtgcct tactctgcca tgtgggattt accccaacaa
                                                                     1560
ctgaggactg cagtggatag taaccatata attgctacca aaaacagtgg tccttaggtt
                                                                     1620
                                                                     1680
ttagttaagc aagagagaaa gccttgagac tacaactcca gcaagttagg ctttatgttg
atctgaaccc cccgccctca cagcattcta ggaactacag taacgtcagt cggttgcagt
                                                                     1740
ggtacaacga gcctgcacca gtctagctac ggaacacttt ggaatacttg tcagagcgca
                                                                     1800
ctggcatctg ttaatacatg gcctgaccca tgtacccatt accataaact caaccacaga
                                                                     1860
cgagacatcc agaggttaaa aaaaacccta ttacttcaac atagcaatag agagaaagga
                                                                     1920
taaaagctgc ctccagaagg tggctgcatc agaaatgaaa atgtgccttc caatagatta
                                                                     1980
cacaggetgg gagttetgte ttggeteect teaaggeete tggttetate ettaaaacaa
                                                                     2040
taatacaett eeaetgagae aggeagggea eteteetgtg gttetgetgg etecaeeaca
                                                                     2100
ggccctgcta gtcctttgga aaggccccag gcttggcaat tcaggaaagc ccagggctgg
                                                                     2160
ggggagcagc atgcacatgt cagaagagga atgaagagct gctatccttt ggttcagacc
                                                                     2220
ccataaccac cacctggtac agactccaag gaaaagctgc agttgtgtgt aaaggtgagt
                                                                     2280
tecaccacat acataggtgt atetttacat atacageett tgtggggeea caaacceaga
                                                                     2340
tttcctccca ctgctccaag tggggtgcac aggtggtaag aaaggacagc aagagttgga
                                                                     2400
ccaaaaagaa tgacctctct gggaacgtga gagggacaat ggcagaaata agcacaaacc
                                                                     2460
agcccggggc actitiatta cactatigig ggctaaggag cccagggcat aaactcatgg
                                                                     2520
gtttaaagaa ttggctcttt atcaaataaa ggaaaaaaat atatatatat acctatgtca
                                                                     2580
gcctcattcc tttggtcatt acaaaacaga aataaaagtt attgaaaact tgtgggcagt
                                                                     2640
tcaaggaaca tctctgcttc tctgctctgt gctttctctt ccctctttc cccagaggca
                                                                     2700
ggagaagcaa gtcctcagga gatgctgcaa gtagctggtt gatggaggtt tttcactttt
                                                                     2760
atttttcata aaagcaagaa tgaatgagaa ctagtgggaa tgtccccttc ccagctggga
                                                                     2820
caatggatgg gtcgaaggtg aagagtctct gttcactgga aggtgcgtgc acagaggcca
                                                                     2880
caggaagggt gggcttgcca agcgggtacg tttgttgcta accttgcgcg cacacacagg
                                                                     2940
ttgtgactet taegggeage atggtttetg ateetteeta aggatgeage ägtettttäa
                                                                     3000
aaaaaatatt gtattataat aataataata atatgaattt etetetettg ttttttttt
                                                                     3060
ttgacttgct gttgttttct tttttcccca tttcttttag ggactggggt aggaggggac
                                                                     3120
aggaagaaaa aaatgtcatt cgtcagttag gtcctgaaca aaaagaactt ctgtgtggct
                                                                     3180
gagteeggee eteetgtage gtagggggat tgggeeaeet eetetgaagg gatgeaggge
                                                                     3240
agcactccgc ctgggaaaat ttggcttcaa tctgaaactt ttctggggct ttccttcaag
                                                                     3300
gagaataaga agtcgtggat tactgttaga gactgtgaaa agtggaatcg tctctctact
                                                                     3360
cgagaatcat taggtaattt gaagatgatc ttgacacttt cagggtcatc aggggaaggt
                                                                     3420
tcagggggca ggcattccaa cttcctttcc ttttcctcct gtaaattctg ccgccgtctc
                                                                     3480
tectetgeca aettitigetg tigeacetee tectiettee geegettaeg etecegetee
                                                                     3540
tecegittet tiettett eteetigtea getetgagag aggecaggia ggeeteatee
                                                                     3600
tgctgttgtc tcagcacttg ggtctggttt ctttcttccc tttctaggcg ttctgacacc
                                                                     3660
aggtaagtet ggttageate catgataaat gteagttggt taatgaggte ateaggttge
                                                                     3720
aatgaggeet tetageegte ceaeceaeag gteatteeet tegateette ageataatea
                                                                     3780
tggccaggaa tggataggtg ttctctcgta aagcctgtga gaccctgtat ccctcaggtt
                                                                     3840
tgtttgtaga gcatgcccag aagagcatcc tagtgtttat tagtgaaata acttcaggtg
                                                                     3900
cacagagtgt gttgcgacaa aactcatcag agtcctggtg atcatctcca tgaagataaa
                                                                     3960
ccaaaagaaa gcgaagctcc cttttggcat cgttaagtgc ctggctgtac gttccctggt
                                                                     4020
agaagacagg gtgtgccctc ccatatttct cttcaaaaga gtgcataaat gaaacaatgt
                                                                     4080
ccccaacggg gtcagtgacc cggctgcgag ggtcaggccg tataaaacga agagcaaacc
                                                                     4140
taaatatatc aagtatcgtg taataggtaa accggaatgg aagcattatc aagtaataac
                                                                     4200
cccatccaag cagcccctt ggttgaggtc ttgagacaac atagctgtag atcctgtggt
                                                                     4260
cagctgtatt aacctgcagg ggtcgtgatg gaggtgggtt gaaaacacta ggtacgccct
                                                                     4320
cttgctcatt caatctgtcc tgtacagcag cctctatgtt ccagttatgc tgttccaagg
                                                                     4380
tatggcgaca ctgatccata gattcgatgc cagtgagatc ctgaaactgc agcagcttct
                                                                     4440
ctgtctgctc ctgggttaga tcccgctcct caggegeege cattttgeeg eege
                                                                     4494
```

```
<210> 5621
<211> 1719
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (412)...(286)
<223> similar to gi3249110 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5621
ttttttttta tgggaaagga aacaatttat tatatttgag gaaaatcatt aaaatacatg
                                                                       60
taatatgttt ccaattcact gatttaaagg catatagatt taatttttaa atacactttc
                                                                      120
aaagetgtta egeacagtte catagtecag qtqqteaatt tetteetete aaaqttaqaa
                                                                      180
aacacttgaa ggacacggga ttcaaaaaaa cctttattaa tttttaacac tttctttttc
                                                                      240
cttccttagg atcttgtttt ggtctagcag atcgagcaaa ctgaaccacc atqqqttttc
                                                                      300
caaaaaagca catatecatt agetteettt aagggetttt getgetgett ttteattagg
                                                                      360
aagtocaatg aaagottgto otttoataog acottottto atcaaacgta tatcaaacat
                                                                      420
gateegetgt gtttetgatg aaaagteaac atatetteea aaaatatatt taaggteett
                                                                      480
ttettgaaca tgtttageta aattetttae ataaatteta cagtttggtt cacceggtte A
                                                                      540
ataacttctg aaaactgaaa gtgtttccat ttcttctcta gaaattctgc ccttttccaa
                                                                      600
ttcccttcta gaaatacatt gtgaaggcat ttcatcagag tcttctttaa tctcctctgt
                                                                      660
gatgtccaaa ttaggtttgg ggaagatttt tccaaatcct atattggatg catcaacttc
                                                                      720
agtagcaggt aaatcatgat ttttttcctc acaattttgt tccttttcta aatctttctt
                                                                      780
aaatgcagct ggcatgtcgg tagatatatg gaattcaatt cttttgttac ctacaggttg
                                                                      840
tggttggtca aatacatctg aaggtaacag cgctggatgt aaactgctgt gtgaaggaca
                                                                      900
caaaggigta ticaacatat cottiatitt totottitt otcacatggo gotgottiat
                                                                      960
tgttttaggt cttttgggct gaagatttgc tagttccatt aatttgttca ttctctgtcg
                                                                     1020
gtecteatea teagtgettt catattetga ttetteaeta gataatteet cateetegte
                                                                     1080
tggcaaagga ggttcctcag gtggctgagg agatgtgggt ggaagaggtg catqcaatgg
                                                                     1140
catatagtet teatacatgg gaggtegege agtaattggt ecaaaaggtg tgggcaaatt
                                                                     1200
cattttattc ataagatgaa ggacctgtac atagaactta ggcacgcttg ccaaggcatt
                                                                     1260
tacaatgttt gctaggattg tgctggaagg tggtgggtac atatacttga ggcatgaatt
                                                                     1320
taaaggaaaa gtcagcccat ggtttggtgc aattccattt tctactgtta aataaccaag
                                                                     1380
ttctttttt tcttttcct tccttaggat cttgttttgg tctagcagat cgagcaaact
                                                                     1440
gaaccaccat gggttttcca aaaagcacat atccattagc ttcctttaag gcttttgctg
                                                                     1500
ctgctttttc attaggaagt ccaatgaaag cttgtccttt catacgacct tctttcatca
                                                                     1560
aacgtatatc aaacatgatc cgctgtgttt ctgatgaaaa gtcaacatat cttccaaaaa
                                                                     1620
tatatttaag gtccttttct tgaacatgtt tagctaaatt ctttacataa attctacagt
                                                                     1680
ttggttcacc cggttcataa cttctgaaaa ctgaaagtg
                                                                     1719
```

```
<210> 5622
<211> 5769
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (344)...(2898)
```

```
<400>,5622
tttcgtcagg aatttccctt caaggtagca ggagatgaac gcgtgctgct ccaggatttt
                                                                       60
acagaactga ttctgcagca aagacaaatg ttgcctgtat ttgccagata gtataaacag
                                                                      120
gagcaaaagt tgcacagcta aaccaggggc tcattcccag gacagacatg cagttatgga
                                                                      180
ttccgaaaga caagtcaagg acactgatga cattgaaagt cctaaacgca gtatccgaga
                                                                      240
cagtggctac ategactget gggatteega gegeagegae teeetetete eteetegeea
                                                                      300
cggcagagat gattccttcg acagcctgga ttcctttggc tctcgctctc ggcagacgcc
                                                                      360
ttcaccagat gtagtcctca ggggaagcag cgatgggaga ggaagcgact ctgaatccqa
                                                                      420
cttgcctcat cggaagctgc cagatgtgaa gaaggatgac atgtctgcac ggcggacttc
                                                                      480
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gacggcctac gtccccgcgc ctctgagaaa gaagaaagca gagagagagg aataccgcaa
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gagetggagt acegeeacet eeccegetgg gttggggaag aaggeeette aagattaegg
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tecgagaact teetgtgtet gaatgaegea gagageacea geatgtttga eatgeggtgt
                                                                      720
gaggaggagg ccgcggtgca gccgcacagc agggcccgcc aggagcagct gcagctgata
                                                                      780
aataaccago tgagggaaga ggacgacaaa tggcaagatg acctggctcg ttggaagagt
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cgtaaaagaa gtgtttctca ggacttaatc aagaaagagg aagaaaggaa aaaaatggag
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aagttactgg ctggagaaga tgggacaagt gaacgaagga aaagcatcaa aacctacaga
                                                                      960
gaaattgttc aagaaaaaga gcggagagag agagagctgc atgaagcata taagaacgct
                                                                     1020
cggtcccagg aggaggcaga ggggatcctt caacagtaca ttgagaggtt caccatcagt
                                                                     1080
gaggetgttc tegaacgett ggagatgeca aaaattetgg aaagaagtea tteaacagag
                                                                     1140
ccaaatttat ceteetteet gaatgaceee aateccatga aatacetgeg gcaacagtea
                                                                     1200
etgeetecae ccaaatteae tgeeactgtt gaaaccaeca ttgetegtge cagtgttetg
                                                                     1260
gataccagca tgtcagcagg cagtgggtct ccaagcaaaa ctgtcactcc caaagcagtg
                                                                     1320
cctatgctga cacccaagcc ttactcccag cccaaaaatt ctcaagatgt tctgaagacc
                                                                     1380
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                                                                     1440
gaaagagagt gtcccacggt ggcacctgcc cactccttaa ccaaatccca gatgtttgaa
                                                                     1500
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                                                                     1620
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                                                                     1860
gtaaagecaa aatetecaga accegaagea aegetgacat ttecatttet ggacaaaatg
                                                                     1920
cctgaagcca accaactaca tttgccaaat ctcaattctc aagtggattc tccaagcagt
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gagaagtcac ctgttacgac accttttaag ttctgggcat gggacccaga agaggagcgc
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aggcgacagg aaaaatggca acaggaacag gaacgtttgc tccaggagag ataccaagaa
                                                                     2100
ggagcaggac aagcctgaaa gaagagttgg gaaaaggccc aaaaggaggt ggaagaggaa
                                                                     2160
gaacgcagat actatgagga ggagccttag attatttgaa gaccctgtgg ttccatttac
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                                                                     2340
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                                                                     2880
agcetacaac attgtgacac ggettteaag etteeggate acteaceatt tetttaetga
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gagtgtcccc tggcaactgc ttaacaaaat cccaagctca ggggcttctc agcatttacc
                                                                     3000
```

```
taatttctga aaggctcttc tgaaaggtgg tatctgttct ttcgtagcac agtgtttatg
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gaatatgggg ttgtaatgat cctgaatagc tcaaaaaagg ttttagcatg gtcaaacagg
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cttatggttt aaaatgtgtt attctcttct ttgggaatta gctaaatgat gcaataaacc
                                                                     3240
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aagtgcaaga catgccaatt tgagacacac ggtcttctaa gactgaagga taaatttaat
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gcatttcaga aactaaacat cacagcaagc tctatctctg agctataatt tgtttttaat
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gcaaagacac tagtttgata atatactg taatcctgaa acatttgtgt tacttacctt
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tggaggtaga aattatacca ataaattatt gcaccgttag tattagattc tgtgtacctt
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ctagatttac actccgggac gttgcccaaa ggtaggaaga aagcagaggg aaatatttca
                                                                     3660
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                                                                     4500
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                                                                     4680
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                                                                     4800
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cacaaacatg tacaatatgg tcattcataa ccgattttta tagaatactt tttacatgtg
                                                                     4920
caactccatc cgttatgtaa ggattacatg aatattgcac attcccttct ggtttcacaa
                                                                     4980
acceatttat acatatttet tagtgagget cattgtaeat gtattgaage tagaategag
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gtcaccagca cagaataatc tccaacattt tctaaattct aattqccaac tqtttctatt
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tatatttgat ttatatttca tttggagtct gttacatggc agcttaggca gactagatct
                                                                     5220
tgttttttcc aatgcagcat aatgagtatg atctatttct tttcaaataa tctttgagat
                                                                     5280
cccaggaaaa aaaaaatgct ctgctccatt gagctataat gtaaatgtgt ttgtttaaaa
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aacaggtgag gcaagtgagt gatttattgt teetgaggaa gtatatetga tittttttet
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catactccaa aagctagtee etactettta ataaaaataa tgggtaactt tttgttttte
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actagogaac ttocatgaca tttoctttot atgtaggggg attaatgcaa tacatattat
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agttatctat acacagtgta agatttaaca aactgaaatg atccacctca tatgtgagtc
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cgtccaaaag atgttactgc tctgggtggg ccagtgttct atatcggtta tactaacttt
                                                                     5640
catttaaagt atttattcta aaatgcctct gagaaacagt aaaaaataaa aacaacaagt
                                                                     5700
tgtctaaaat gcaacagctt ttatagtaaa tgtacattta taaataaaat actcaaatca
                                                                     5760
aaaaaaaa
                                                                     5769
```

<210> 5623

<211> 2478

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(2479)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1900)...(889)
<223> similar to gi5262615 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5623

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                                                                      120
ttaggaaatg tgggtttgcg caatcaccag gccaagcctg ggggtcctcg gggaagctac
                                                                      180
tectecaggi cacetgecag giggatgeae ticetiggge aatgggigae ceteccagga
                                                                      240
caaggggaac cagcagggac tcgatggcac cacacagcag ccacctgttc tgacaatgtg
                                                                      300
acacagacca actaatgcca gagcccagga gaagccacag cagagctgcc tgggttggtg
                                                                      360
teagageaac aggeagaagt gactgtgeeg eeegtggget gteateeace ggtggetaet.
                                                                      420
gtgtcattct ggaaaaacta tgatgccatg agactctgag aaaccgaatc actgcagaga
                                                                      480
caaactcata aaaattaaaa ccaatccata aaattgtatc tagaaactct gtccctggtg
                                                                      540
ccaataagca gcaaagtcaa caaagagtaa aaactaaaac ttcaacacat tattaaaaag
                                                                      600
caaaactgga ctcaactaca atcacttctg gttagtccac tagtgaaccc aaaagtgact
                                                                      660
taaaagtaaa aatcattatt agcaagagat taagaacata acttcattga gaggtcaatg
                                                                      720
ttaagagaac agttcattaa aagtttctgt ttaaaaagaa aaggaaaggc ccaaatagcc
                                                                      780
atttcaagge agageaggtg aaaggeetgg aacacteetg tgegeteact gteggetget
                                                                      840
gaacagggag cccaaggcca gcaggatgga gggtgtgacc gagggcttgg aggaggtggt
                                                                      900
gtactggatg acatactctg ggtagacctg gtgtttctca aagatcacaa agatggaggg
                                                                      960
gtcggacaca ctgttcacgc agctatcata gaaggegttg ctccagccct ccttggccgg
                                                                     1020
cggacggaca aaggaggcat tgcccctgac gaactcgccc accagcaccc gggccaggaa
                                                                     1080
catcgtgtgg gtctgcgtgt cggatttgct gtagtggtgg gaatatgcag catctcgggc
                                                                     1140
aaagtagete eeettgeegt aggaagtgee atgaacacea cagaceegee agteaaagtt
                                                                     1200
ctgctggcag atggcgtcca caaaaatggc gctggtgccg tggaacagct gccgctcgtc
                                                                     1260
cacggeette ceteegttet gettetgeat etgteetttt tgeeactggt agaetteeca
                                                                     1320
gagggccagg ttctgtactc gctcaatctt ctgaacaaag taaaaaggca gcgtgcggtt
                                                                     1380
aaagaggtte cagacettet gataetette egaggaagaa etaagggtga tettetgaaa
                                                                     1440
gcctgggtct ggcagggcag aggagtccca atagtctggg atgctcttcg ggcctggaaa
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cttggtattg caggtttgca tggtcgtcac atcctgggga gacacgtatt tgggtctgcg
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gcaaaccttt ttagttgtgc catagaccag gtttttctga acgaaggctt tgaaatctaa
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ctcgtagttg tgctttccgg cctggaactt caaggtggct gcctggccgt cagacccgg
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tgtacagtag gccaggtagg cettetecae gtegetactg etgacagtgg teacagggtg
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caccgtgccc tgtcttccat attcctgcca agaaccaaac tcatcactcc agtaccaaat
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ccagtcagtg gtgaggatga agtgtggagg tttggtgaca gaggaggccg tggagaggcg
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gcgagcctgg gtagcaccgt aagtcatggc gttaaagttc agacaatgag agtgaaaggt
                                                                     1920
actggctgac tcagagcaca ggatcctttc tattttggga ttgcaatatg cctcttcaat
                                                                     1980
aagttecatg ttgtecaaat ceteceattt geetetatee aagaattgee ategataegg
                                                                     2040
caaatggaaa tgaactctat ggcacttatc ttgaaagcta caacttttcc ggatatggta
                                                                     2100
caaacagatc tgatcaccct cctcctggct aagagtgttt ggggacacag aacctgaact
                                                                     2160
gtcttttctt tcagaagtcc cctgtgggac aaaaagagga ggcactctgc tgggggcaga
                                                                     2220
gctcttattc ttgatgtcat gtgcatttct ataaatggta ggcagcctgc tcaccaggtc
                                                                     2280
tgagctcata cccaacttct ccaatttttc cagattctca gaattagaga aatcatggga
                                                                     2340
tctcttacag ctagtgccaa acttgcattc cccctgtaaa aaatactggc agatatggag
                                                                     2400
catgatgcac tgcttttgaa aggcacaaga gccgtgacga aatcgtcgac ccggnnnttc
                                                                     2460
cgggccggtt ccgaacgg
                                                                     2478
```

```
<210> 5624
<211> 4287
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (191)...(3290)
<223> similar to gi3882213 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5624
egetgetect getetgetae etgaatgttg taccatettt gggtaggeag aetteeetga
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cgacatcagt gatacccaaa gctgagcaga gcgtggctta caaagacttt atttattta
                                                                      120
ctgtctttga aggaaacgtt cgcaacgttt cctgaaagtc ctcggttgaa gtattttatg
                                                                      180
cetecteage cettgtgttg tecaatttgg gaagecagtt gtttecatee tgagttecag
                                                                      240
aagtaggcat teeeegtgta caaaaaaagg gtgggaagga atgaggaaac atetteacae
                                                                      300
caggcaggga cacaaatagg tacatgtgga aatttccaag gcattatggg tttacagaga
                                                                      360
tgattatttc atcagacatt ccatctctgt atctgcagtg atagtacgcg cctggattac
                                                                      420
tcacaaatac aggggcagag actggaatgt taaatgggag gaaaacttgc tccatgctgt
                                                                      480
agcaaagaat tataccetee tgeagaceat eeegeetttt gaaegeeett teaaagatea
                                                                      540
tcaagtgtgc cttgagtgga acatgggtta tatttggaac cttcgggcaa acaggattcc
                                                                      600
acagtgteet etggaaaatg atgtggttge eetgettgge ttteettatg eeteeagtgg
                                                                      660
agaaaacaca ggcattgtca agaagttccc gaggtttcgg aaccgagagc tggaggccac
                                                                      720
tegacgecag aggatggatt acceagtgtt tactgtttea ttgtggettt atttacteca
                                                                      780
ttattgcaag gccaacctct gtgggattct gtactttgtt gactctaatg agatgtacgg
                                                                      840
cacaccttct gtatttctta cggaagaggg ctatttgcat attcagatgc atcttgtcaa
                                                                      900
aggggaagac cttgctgtaa aaactaaatt catcatacct ttgaaggagt ggtttcgact
                                                                      960
ggatatetet tttaacggag gecagatagt agtaaceaet ageattggae aggatttgaa
                                                                     1020
aagctaccac aatcagacca ttagcttccg ggaggatttc cattataatg acacagctgg
                                                                     1080
gtacttcatt attggaggga gcaggtatgt ggctggcatt gaagggtttt ttggacccct
                                                                     1140
gaagtactat cgccttcgca gtctgcaccc cgcccagatt tttaatcccc tccttgagaa
                                                                     1200
gcaacttgct gaacaaatca agttatatta tgaaaggtgt gctgaggttc aagaaatagt
                                                                     1260
atctgtgtat gcatctgcag caaagcacgg gggcgagaga caagaagcat gccacctcca
                                                                     1320
caactectae etggacetee agegeaggta tgggagaeee tegatgtgea gageetteee
                                                                     1380
ctgggagaag gagctgaaag acaaacaccc cagcttgttc caggcattgc tggagatgga
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tctgctgacc gtgccaagga accaaaatga atctgtatca gaaatcggtg ggaagatatt
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tgagaagget gtaaagagae tetetageat tgatggtett caccaaatta getetategt
                                                                     1560
cccctttctg acggattcca gctgctgtgg ataccataaa gcatcctact accttgcagt
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cttttatgag actggattaa atgttcctcg ggatcagctg cagggcatgt tgtatagttt
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caccaagaca ccccttgacc agcacacact gcaaggagat caggcatatg ttgaaacaat
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tagactaaaa gatgatgaaa tactcaaggt acaaaccaaa gaagatggag atgtctttat
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gtggttgaag catgaagcta cccgaggcaa tgcagcagct cagcaacgat tggcccagat
                                                                     1980
gctgttctgg gggcagcaag gtgtggccaa gaatcccgaa gcagcaattg agtggtacgc
                                                                     2040
caagggcgcc ctggagacgg aggatcctgc gttaatctat gactatgcca ttgtgctatt
                                                                     2100
caagggtcaa ggagtaaaaa agaacagacg gcttgcctta gagctgatga agaaagcagc
                                                                     2160
ttccaaggga ttgcatcagg cagtcaatgg cctgggatgg tattaccaca aattcaagaa
                                                                     2220
```

```
aaattacgcc caaagcagca aagtactggt taaaagcagg aagaaattgg ggaacccaga
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                                                                     2580
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                                                                     2640
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                                                                     2700
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                                                                     2820
ageogeeetg gatggagaet eecagggatt tittaacetg geeetgetaa tegaggaagg
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                                                                     2940
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                                                                     3060
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geagatetgg attettatae actaagatgt gtettaagaa teacagtgeg tgetteatee
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tgcttgccac agccctgttc ctcaaagctg aattgataga tttctctttg acttccaaga
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cctagcagtt ataaggcacc ttgaaataaa ttgtttgtgc ctggaaatgc agggagggca
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ctacccctca tgcctgcgtg agtctgtaca gggatatgtg tgtgtgtgtg tgtgtgtgt
                                                                     4140
tgttagagag gaagaggaag agcagaatgt ctgtatacta catgctgcta aggtagtgaa
                                                                     4200
taaatcagta atgcaatatt gtgggtccaa actactcttt gcactacttt atttacagta
                                                                     4260
gtaaataaaa ttattttat acaattg
                                                                     4287
```

```
<210> 5625
<211> 4593
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (89)...(4021)
<223> similar to gi559703 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5625
tttcgtcttc gcttgacgat ttcgtagggg aggaggccga gtgtttcctg gcgcattccc 60
ggccagcccg agtgactcac tcggccaagg aaactcccag ggcccgccca ggacccccaa 120
```

```
gccgccqcqq acgcaqaatg tggctcagct gcccctggtc ccatcccagg gcagagctcc
                                                                      180
teetgagtae cettgagaet ggageagatt cageagaagg cagattgeee ceteteeetg
                                                                      240
gagctggctc tgaagcccag gatggcggcc caggtgactc tggaggacgc gctgtccaac
                                                                      300
gtggacetee tggaggaget geeeetgeee gaeeageage eetgeatega geeeeegeea
                                                                      360
tectegetge tetaceagee aaattteaac actaactttg aagacagaaa tgeatttgtt
                                                                      420
actggcatcg caagatacat tgaacaagcc accgtccact ctagcatgaa cgagatgctg
                                                                      480
gaggagggcc aagaatatgc tgtcatgctg tacacctgga ggagctgctc ccgggccatc
                                                                      540
ccacaggtga aatgtaacga gcagcctaac agagtggaaa tctacgagaa aaccgtggag
                                                                      600
gttctggagc ctgaggtcac aaaactgatg aatttcatgt acttccagag aaatgccatt
                                                                      660
gagcgtttct gcggggaagt gaggcgcctg tgccatgccg agaggaggaa qqacttcqtq
                                                                      720
tcagaageet acetgateae actgggeaaa tteateaaea tgttegetgt getggaegag
                                                                      780
ctgaagaaca tgaagtgcag tgtgaagaac gaccactcag cgtacaagag ggccgctcag
                                                                      840
tttttacgta aaatggcaga tecacagtee atecaggaat egcagaatet gtecatgtte
                                                                      900
etggecaate ataacaagat cacacagtet etgeageage agetegaagt gatttetgge
                                                                      960
tacgaagagc tcctggcaga tattgtgaat ctgtgtgtgg attactacga gaacaggatg
                                                                     1020
tatttgacgc ccagtgagaa acacatgctt ctcaaagtca tgggatttgg tctgtacctg
                                                                     1080
atggatggga gtgtcagtaa catctataag ttggatgcca agaaaagaat aaacttatcc
                                                                     1140
aaaatcgaca agtacttcaa gcaactccag gtggttccac tatttgggga catgcaaata
                                                                     1200
gaactggcaa gatatatcaa gaccagcgcc cactacgagg aaaataaatc tcgatgqacq
                                                                     1260
tgcacatcct ccggcagcag ccctcagtac aacatctgcg agcagatgat ccagatccgc
                                                                     1320
gaggaccaca tgcgcttcat ttcggagctg gcgcgctaca gcaacagcga ggtggtcacg
                                                                     1380
ggctcgggcc gccaggaggc ccagaagacg gacgcggagt accgcaagct cttcgacctg
                                                                     1440
gegetgeagg geetgeaget gttgtegeag tggagegege aegtgatgga agtgtattee
                                                                     1500
tggaagettg tgeaccecae cgacaagtae tecaacaagg aetgeecega cagegetgaa
                                                                     1560
gagtacgagc gtgccacgcg ctacaactac accagcgagg agaagtttgc cctagtggag
                                                                     1620
gtgatcgcca tgatcaaagg cctgcaggtg ctgatgggca ggatggagag cgtgttcaac
                                                                     1680
cacgccatcc ggcacaccgt ctatgccgca ctgcaggact tctcccaggt gacccttatg
                                                                     1740
gagccgctgc ggcaggccat caagaagaag aagaacgtca tccagagtgt cctgcaggcc
                                                                     1800
atcaggaaga ccgtgtgtga ctgggagacg gggcatgagc ccttcaatga cccagccttg
                                                                     1860
cggggcgaga aggaccccaa gagcggctaa gacataaaag taccacgccg cgccgtggga
                                                                     1920
ecetecagea eteagettta catggtgaga accatgetag agteceteat tgeagacaaa
                                                                     1980
agtggttcca agaaaacctt gagaagtagc cttgaggggc ccaccatatt ggacatagaa
                                                                     2040
aaatttcatc gagagtcatt cttctacact cacttgataa atttcagtga aacgctgcag
                                                                     2100
cagtgetgtg acctttegea getgtggtte egagagttet teetggaget gaccatggge
                                                                     2160
aggaggatec agttececat tgagatgteg atgeeetgga teetgaegga ceacateetg
                                                                     2220
gagaccaagg aggcatcgat gatggagtac gtgctctact ccctggacct gtacaatgac
                                                                     2280
agegeeeact aegegeteac caggtteaac aageagttee tgtacgaega aattgaggee
                                                                     2340
gaggtgaatc tatgttttga ccaatttgtt tacaagctag cagaccagat atttgcctat
                                                                     2400
tataaggtta tggcaggaag tttgcttctt gataaacggt tacgatcaga atgcaaqaat
                                                                     2460
cagggageca egatecacet ecegeegtet aacegetacg agacgetget gaagcagagg
                                                                     2520
catgtgcage tecteggcag ateaatagae etcaategte tgateaceca gegegtetea
                                                                     2580
gcagccatgt ataagtccct agaactggcg attggacgat ttgaaagtga agatttgacc
                                                                     2640
tecatagttg agetggatgg cetgttggaa atcaacegea tgaeceacaa getgetgage
                                                                     2700
eggtacetga egetggaegg ettegaegee atgtteeggg aggeeaacea caaegtgtea
                                                                     2760
gegeeetaeg ggaggateae cetgeaegte ttetgggage teaactatga ettectgeee
                                                                     2820
aactactgct acaacggctc taccaaccgg tttgttcgga cagtgttacc attttctcag
                                                                     2880
gaatttcaaa gagataagca geetaatgea eageeteagt atetgeatgg atecaagget
                                                                     2940
ttgaacttgg cctactccag catttacggc agctaccgga acttcgtggg acctccacac
                                                                     3000
tttcaagtca tctgccggct tctcggctac cagggtatcg ccgtggtcat ggaggagctg
                                                                     3060
ctgaaggtcg tcaagagcct gctgcaaggc acaatcctgc agtacgtgaa gacgctgatg
                                                                     3120
gaggtgatgc ccaagatctg ccgcctgccc cggcacgagt acggctctcc tggtatcctg
                                                                     3180
gagttettee accaccaget gaaggacate gtggagtacg cagagetgaa gaeggtgtge
                                                                     3240
ttccagaacc tgcgggaggt ggggaacgcc atcctcttct gcctgctcat cgagcagagc
                                                                     3300
ctgtctttag aagaagtgtg tgacctgctg cacgcggctc ctttccagaa catcttgccg
                                                                     3360
cgagtccatg tgaaagaggg ggagagactt gatgccaaaa tgaaaagact agaatcaaag
                                                                     3420
tacgccccgc tgcatcttgt cccactgatt gaaagactgg ggacccctca gcaaattgcc
                                                                     3480
atcgcaagag agggggacct gctgacaaag gagcgcctct gctgcggcct gtccatgttt
                                                                     3540
```

```
gaggteated tgacacggat deggagettt dtggatgace ceatetggeg egggeetetg
                                                                     3600
cccagcaatg gggtcatgca tgtggacgag tgtgtggagt ttcacagact gtggagtgcc
                                                                     3660
atgcagtttg totactgcat tocogtgggg acacacgagt toacagtcga gcagtgcttt
                                                                     3720
ggtgatgggc tacactgggc tggctgtatg atcatcgtac ttcttgggca gcagcggcgt
                                                                     3780
tttgctgtgc tggatttctg ctaccatcta cttaaagtcc agaaacatga tggcaaagat
                                                                     3840
gagattatta aaaatgtgcc tttgaagaag atggtggaga gaattcgcaa gttccagatt
                                                                     3900
ctcaatgatg agatcatcac catcctggat aagtacctga agtcaggcga cggggagggc
                                                                     3960
acgccagtgg agcatgtgcg ctgcttccag ccgcccatcc accagtccct cgccagcagc
                                                                     4020
tgagggcacg cgctgcactc cgtaactcaa catggcatgc ctttctctcc gtaaactatt
                                                                     4080
tagtgagatt tttagggact atttttcagt atctctgtac ctgttaaagg gggtgctttt
                                                                     4140
cgatctaaaa acttaatttt ataaaattga cttatttttc tagactaaaa ttgtatatgc
                                                                     4200
ttttggtaat taggaactet tgagaatatt ggetgetgat tgttgeeate aegtteetae
                                                                     4260
aaaattgttt ttctatggga tgttctggca gctgtgtcat aaaatgctgc tgggttcatt
                                                                     4320
cattcattcc ataagaaact taataccagc aaatgcatta aatcccttgc cagttaccat
                                                                     4380
taactataac tatttagctt ttgtttaggg atctttctga tggtctttta tgagcaatct
                                                                     4440
tagttctaag tcattgttcc catccctttt ttgtgtgttt cagaaaatag tgaacttgat
                                                                     4500
tecectgett ceactaaate cagttgtgac aaaatetaac gtgacateag ategaaaggt
                                                                     4560
tatagaaata aaactaatga gatctaaaaa aaa
                                                                     4593
```

```
<210> 5626
<211> 1635
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (465)...(229)
<223> similar to gi1296427 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5626
caaagcaaaa gcaaaaacag ctcattcaca ctttttatac tgattttata ttgaaatgaa
                                                                       60
aatattttgg atagactggg ttaaaaaaaa attaagttca cctgcttctt tttacttttt
                                                                      120
gaaatgtgac tgtcagaaaa tttaaagtaa catatgtggc tcacactatt tctgtgggac
                                                                      180
agccctgcct ctagctaggg gctttggtga gaaccagatg agttgatggg tctcctctgg
                                                                      240
gccctgcttc cctggctgct gaggtgcagg aactgtgagg ggagggcagc ctgtcacggt
                                                                      300
geccaacae gggeaggget ggacaggtae aagtggaaca ggeggataag etgggaaggg
                                                                      360
cacagagaaa aggagctcct cgtgacagca ctttcccacc ttttattatt caacacatgg
                                                                      420
aagggggtgg agacacaagg atagggcaat ggtgagtttc aataaataag agaaacagga
                                                                      480
tggacaggca gtgggcccat gcctgcacgg ccccacataa ataaccaggt tgctgagcca
                                                                      540
gagtggaagt cagggctggg cctggcagcc gcctgcactg cccagaagca ctggcaccac
                                                                      600
agggacacag aaaccactga ggcccaaggt gtgctccagc cccaccaagt cttctcccta
                                                                      660
aageteetga gatettgggg etggetggge aggetaggge tetgtateae agteetgeeg
                                                                      720
ggatcaagtc tattttttca gtttcattaa aaacagctgg gggaggggca ggcacatgca
                                                                      780
ttaagcccct tccgtaggca gagccatgga tggacagccc catgggggcc ttgaaggcag
                                                                      840
aggccctgga agcagcaaaa acggggctgg ataaagctac taatgggagg gatggtagag
                                                                      900
cccagctccc cagtccccca caacccagcc cagaacctac aaagagctga agaggccctg
                                                                      960
ggtactgaga cgtctctcct tacttcacag tcagaaaaat ggacccagcg atggccacag
                                                                     1020
atgtgcccaa gattagaacc cagggactca ctctcctagc ccaggacttt ctgctacccc
                                                                     1080
ttccctttat agacctgctg gaagaggagg gggacgcaca tctgctctag ggccctgtac
```

```
agaggcaagg gtgtggctaa ttaccaagga atggggccag gggtgacggg cacaggcccc
                                                                     1200
tecectetge caageccage etetgatgat acagagaate eegtgggete etaggateca
                                                                     1260
gccagggcag gcacgggggt cggggcatcc ttcaggggag caacatggca gcagggccag
                                                                     1320
gggtgggget cageetgete etgtacacag tgeeegeegg ceacetgeet eeteactggg
                                                                     1380
geggaegete ceacetecag geettggtet ttgetgtete gtetgetggg ceattgette
                                                                     1440
teggteetea cagteecage tgeageteea ceteeteeag gaageetteg gaaceteeca
                                                                     1500
gggcagggcc gcagtgtcct tagactagac cgccctcag atgaccaggt tgctctcact
                                                                     1560
tageeggaee acatageggt teteetegge ettgttetet getggggget teageeactt
                                                                     1620
tgtäcggctt ccgcc
                                                                     1635
```

```
<210> 5627
<211> 4368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4369)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> in = a,t,c or g
<220>
<21> misc_feature
<221> misc_feature
<222> (3700)...(1904)
<223> similar to gi3882187 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5627
ttttttttt ttagaatata agttttttaa tttttataaa taacttatct gttacaaaga
                                                                       60
tagtttaccc agctaaatca caaaaccatc aactcaagat atccaaatta cgttttatta
                                                                      120
ataaaacaag taaaaactga tttatcaatc ttcacataga actgcagatg aagctgaaaa
                                                                      180
acaaggeeta tittaaaaat aaattggate aaaegtaagg gettigggte tatggtttaa
                                                                      240
ttacctagga ttgtcatatt töttööcata tacaaaatgo aaagootgaa agttagggot
                                                                      300
ctgacattca tagagatcaa ctgtaataat cccatttaaa acacagccac ttgcaaacat
                                                                      360
ttacagtggg tggtagteta tattatette cateetttge tetattteag caetteeett
                                                                      420
agccccatte taagcactea tataatttea taattetgte titttaaatg cataetgtte
                                                                      480
tttttättga tttcagttat atacattcct gatcatctga atattttcct tacaaaaata
                                                                      540
tatcatcaaa ataaagagat gettgaggtt getteagtgt teaagtttge ttgtttttt
                                                                      600
ttccagettt tetteägttg teetaaatat ggetageett gttttataaa tacacatgat
                                                                      660
actgtcacca agtcaggatt agaaatggac tgccccaaca gtaaagcatt taaacttctc
                                                                      720
tecaaaaaaa gggetgtagg taetgetget gttgetggtt ttgagaetgt aettteedaa
                                                                      780
taacaactgo ttgtgcaagt totgtgggac accaagcaga tgaagottaa cottgttgtt
                                                                      840
ctgtcagtgg gttaaaaata tcttttgttt taagcttccc tgtggaagac aaacactgtg
                                                                      900
ttgtgtcacc cactgctcaa gtcagtattt aatgtgacct acagacatca cttctgtaat
                                                                      960
atcatctgca attcactgtg cagcatctgc ctgtcttcac acaacattgg aactcatgag
                                                                     1020
ggcaaagtac agaataagta gaggaaagtt attcctqtqc catactttcc acctcattaa
                                                                     1080
tgctttttta ttttaaggca ttgttcctct caggtaaggc ttaaaaaggg acatgatcgt
                                                                     1140
gettaattae taaaaggaaa aaagaaaatt agttaacaaa aggetattae actatacata
                                                                     1200
tagaaatata agaaaataat caagaagaaa agaaatcact taaagcagac tcgagagatc
                                                                     1260
tgtacagtag gaaaagcttt ggggtatttc gctgcacatt tgtacagaca atgcatgctg
                                                                     1320
ctttcctttg catctttagc ccctagatgc tggcttcaca gagtggagac acgttcaggg
                                                                     1380
```

			atttctgaag				1440
			taaaccttgt				1500
			aagctatcat				1560
aaattcagta	gtgacatgag	gggaaaaagg	tattgggaac	acctaggtgt	taacatattg		1620
agaattatcc	ataatgggac	actggtaaca	ctgtacacag	ttaggcagtg	ggcaaccaag		1680
tctttcagca	gattactttt	catgtgatga	atttcaactg	ctcatgacat	tatactgagg		1740
tattattagc	tctgtgggct	gacatttaac	attagcagaa	caccatcttg	tcacaccttc		1800
aatttgacaa	aatcctatgt	agcagtgaaa	ctttttcccg	atgacagact	agtttcttga		1860
actttagatg	tggttttaga	gaagatacag	ggccatttgg	ctcagaaatg	ccttggcatc		1920
			tggttcaaaa				1980
cactgagctc	cctcatcatc	ttctgtgtct	tgagtctttg	gtgttttgat	gatggacctt		2040
			acaaatccaa				2100
atagcgctgg	ggttaaaatg	tggtcctcgg	gcttgaaaaa	gatcaatttc	tttggttaag		2160
			caacttctca				2220
			ttcaggcgcc				2280
			agctttttct				2340
tgaagtcgtt	ccattctggc	cttctggtgt	accaaaagag	ctcagtctac	tgagtaactg		2400
			taatttcaaa				2460
ctccatatgt	tgccccagct	ggtctcaaac	tcctgggctc	aaatgatcct	cccatcttgg		2520
cctcccaaag	cactggaatt	acaggcgtga	gccaccatgc	ccagccaaga	attacttatt		2580
			tcagatccca				2640
			tccgtgaggt				2700
acataatgat	caggatgatt	aagaagattt	gtaagttcaa	aggtaggga	caccacccct		2760
			actgtaattt				2820
			tgcagagtta				2880
gggaggatgg	tgatgaataa	aggcaggacc	catgctcact.	tgcccagaca	tgttcctgga		2940
ggcagcagat	gctccagagt	ttgtggatat	gaagagtgtg	ggctgattcc	gcatgacctg	٠.	3000
ttcatctcct	gtggcagcat	tcgctgaaat	atagacctta	ggttgactac	gggacatcag		3060
ctcatccgta	tttggggggc	tggcagctat	gtaaacagtg	ggctgatttc	tgtttaaggt	٠.	3120
			ggttcgaggt				3180
			gatttcaatc				3240
			ggcagaagac				3300
			actgattggc			٠.	3360
			ggtatgtgac				3420
			ataaacttgc				3480
			ctgtcgagtt				3540
			tggactgtta				3600
			accagtctgg			-	3660
cataatggga	ttaaatctgg	gagtttgttg	agaaaggcta	gatgttcctt	tgctgcctaa		3720
gtgaaatcca	agatgtggtg	ctgaatttga	agcaccagag	gaactggaca	ttccaaaaac		3780
			tgtctgtggc				3840
			actaatgctg				3900
			gtaaatgttc				3960
gagagaagtc	atgtgattgc	gtagaccaga	aattccagaa	tcatctgaaa	aattcaagtc		4020
			ctgagagaga				4080
			tacaacaact				4140
ttgtcgcagg	tcatgtaaaa	cctgaaaatc	aatttggtgg	cttccttggg	ccattcgtat	٠.	4200
attgcctgat	caggactatt	tgtacacgta	cggcaattat	aggccttagt	ggaaatagta		4260
ctcatctctt	ctgtccaagc	attttctgta	aaagaaagaa	aaacggacgc	gtggntcnnc	,	4320
ccgggnnttg	gcnagaccac	gttgcnctaa	gttcaaggcc	ctggctcc	*		4368
		•	•				

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (373)...(2244)
<223> similar to gi3560144 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5628
ggcacgagec gtaggetect teagggetga gecatecege gtgtettgeg eteggtggaa
                                                                    60
atgeccagee gagggaegeg accagaggae agetetgtge tgatecceae egacaatteg
                                                                   120
accecacaca aggaggatet aagcagcaag attaaagaac aaaaaattgt ggtggatgaa
                                                                   180
240
tttcttgcag accgaacaga aatgctgtct gagagcaaga atatattgga tgaactgaaa
                                                                   300
aaagaatacc aagaaataga aaacttagac aagaccaaaa tcaagaaata gtcaacctga
                                                                   360
tttcacataa caatgtgtgg catttgttgt tctgtaaact tttctgctga gcatttcaqt
                                                                  420
caagatttaa aagaggactt actatataat ottaaacago ggggacccaa tagtagtaaa
                                                                  480
caattgttaa agtotgatgt taactaccag tgtttatttt ctgctcacgt cctacacttg
                                                                   540
aggggtgttt tgactaccca gcctqtqqaa qatqaaaqaq qcaatqtqtt tctatqqaat
                                                                   600
ggagaaattt ttagtggaat aaaggttgaa getgaagaga atgacaetea aattttgttt
                                                                   660
aattatettt eeteetgtaa gaatgaatet gagattitgt eactettete agaagtaeaa
                                                                   720
ggtccctggt catttatata ttatcaagca tctagtcatt atttatggtt tqqtaqqqat
                                                                   780
ttttttggtc gccgtagett getttggcat tttagtaatt tgggcaaqaq tttctqcctc
                                                                   840
tetteagitg geacceaaac atetggattg geaaateagt ggeaagaagt teeageatet
                                                                   900
ggacttttca gaattgatet taagtetaet gteattteea gatgeattat tttacaactg
                                                                   960
tateettgga aatatattte tagggagaat attattgaag aaaatgttaa tageetgagt
                                                                  1020
caaatticag cagacttace agcatttgta teageggtag caaatgaage caaactgtat
                                                                  1080
cttgaaaaac ctgttgttcc tttaaatatg atgttgccac aagctgcatt ggagactcat
                                                                  1140
tgcagtaata tttccaatgt gccacctaca agagagatac ttcaagtctt tcttactgat
                                                                  1200
gtacacatga aaggaagtaa ttcagcagtt cattgatgtc ctgagtgtag cagtcaagaa
                                                                  1260
acgtgtettg tgtttaceta gggatgaaaa eetgacagca aatgaagttt tgaaaacgtg
                                                                  1320
tgataggaaa gcaaatgttg caatcctgtt ttctgggggc attgattcca tggttattgc
                                                                  1380
aaccettget gacegteata tteetttaga tgaaccaatt gatettetta atgtagettt
                                                                  1440
catagorgaa gaaaagacca tgocaactao otttaacaga gaagggaata aacagaaaaa
                                                                  1500
taaatgtgaa ataccttcag aagaattctc taaagatgtt gctgctgctg ctgctgacag
                                                                  1560
tectaataaa eatgteagtg taccagateg aateacagga agggegggae taaaqqaaet
                                                                  1620
acaagetgit ageeetteee gaattitggaa tittgitgaa attaatqiit etaiqqaaqa
                                                                  1680
actgcagaaa ttaagaagaa ctcgaatatg tcacttaatt cggccattgg atacagtttt
                                                                  1740
ggatgatage attggetgtg cagtetggtt tgettetaga ggaattggtt ggttagtgge
                                                                  1800
ccaggaagga gtgaaatcct atcagagcaa tgcaaaggta gttctcactg gaattggtgc
                                                                  1860
agatgagdaa ettgeäggtt ättetegtea tegtgteege ttteagtege atgggetgga
                                                                  1920
aggattgaat aaggaaataa tgatggaact gggtcgaatt tettetagaa atettggtcg
                                                                  1980
2040
tgttgtctcc tttctaaatt ctctgccgat ttgggaaaaa gcaaacttga ctttaccccg
                                                                  2100
aggaattggt gaaaaattac ttttacgcct tgcagctgtg gaacttggtc ttacagcctc
                                                                  2160
tgetettetg cecaaaeggg ceatgeagtt tggateaaga attgeaäaaa tggaaaaaat
                                                                  2220
taatgaaaag gcatctgata aatgtggacg gctccaaatc atgtccttag aaaatctttc
                                                                  2280
tattgaaaag gagactaaat tgtaatgtga ttcacaatgt aacaatataa aaataagttt
                                                                  2340
ttatataatt atataaaagt aagatactet getgetttae tattgtataa tatagtattt
                                                                  2400
ttaaaqttca
                                                                  2410
```

```
<210> 5629
<211> 2102
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1760)...(663)
<223> similar to gi4406590 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5629
cetteeeggg gettgggaat gttetgagee eagetteetg tegaagaeeg ceatettget
                                                                       60
cetacgaete etggteaceg tggteeeggg ceettetetg aaaaggggea teeecageee
                                                                      120
                                                                      180
ggagcgtgat ggaccaatgc gagggcctga gcccgagggt gcggacagta aaccgtttat
tactgtgtgg acacagacac cgtggtgcat gacagacagt ttcaacacca tgagcgctgg
                                                                      240
ggacggaget gtgcctggac agetetgegg tgtgtggtgg egecaegetg ggccggetgt
                                                                      300
caccgccage tgaggcgcta acagcgtcae etgggagaaa acetggaaac egtetaatga
                                                                      360
agcaggtgac ttaggggcgt ctctagaaac ccaaagaaat gtaccttaaa taagcaaata
                                                                      420
taaaacacaa aaaagacgag cagacctggt gttccgtgtc aggcagaatc taaaaaaacc
                                                                      480
caggagttgc acttggtttc ctcactgtca tgtgtgatca caggtcagga cgtttcacag
                                                                      540
cagegegece aggeteetgt gegtgetetg gtgeactgga gtetgggget ggetgggett
                                                                      600
etggetgtee tetgtegeeg gatgggeteg aegaateage geagegagge eggeeetta
                                                                      660
egtggtgetg atcccactca getectgeet gatggegteg atgateteet cetteacett
                                                                      720
gtggagetet eteaceaeet eetetaggat eteetgette ateeggteea agtegaagge
                                                                      780
atccagggcc atgtcattca cgctcccagc aggcttcatc ctagagtgag gctgcgactg
                                                                      840
aagggggctc ttagcttcgg ggctctttgc cacagacggg gttctggaca gaatcgagga
                                                                      900
cacaggette tecacegagt tgeteegete eeagggette eggeeageet etgaggagtt
                                                                      960
aggtggctgg ctggctgctc gggtccccgg agagggggag gtactaggat cttccatttg
                                                                     1020
gettteatet teettettet eggetggett gtetgaetgg gaggetgett tteteetett
                                                                     1080
ggccagcagt ttgttcattt cctccatgag gcctcctccg ccacccccgc tgcttgcccg
                                                                     1140
gttggcatcg gactttgagg tcccactggg actggagect ccagatgcgt cttctggccg
                                                                     1200
ttggactett etcagettgg ecceeageta atggeaageg gecagteetg aacatggaag
                                                                     1260
ctctcgtcgt ggctggaccc cctgggcttc ctccggctgg caagtggggg tggggggggt
                                                                     1320
ggggtaagcc ccagtgggtg gaggtgggac tgggggtggg gggggcggtg gaggcccact
                                                                     1380
acatgagacg ggggcgctgg ctgcagatga aggatgtcct ggtgggagga tgggccctgt
                                                                     1440
ggccgaggtt cttctttcta gagattcctg acgctgctgc tggtgctgct ccatcacttg
                                                                     1500
tettetetgg atgtecatet cateaggaga ggggecatte tgcacetgae getggetgga
                                                                     1560
ggggcctcct tcttgggaat tcatgatgtt cagggcaaac agcattgcat tggagaacgt
                                                                     1620
ggttgcctct tctttacttg caaagtttaa gccgtagacc tggcgggcat ctcgccactg
                                                                     1680
gtggaaggtt ggcgtggcct gattgtactt cagccctttc acgattgaat aattgatcac
                                                                     1740
aacctgctga teetgcaact tgactccaac gactetgaag gtgttgctgg cagtgttgtg
                                                                     1800
gtagatgttg atccggctga atccctgctg gccaggtttg attggtaccc atttcttact
                                                                     1860
ggtgtcatcg tagaccatca cggaagcccg ggcttggcag atactctgtt cacttgtggc
                                                                     1920
catggctgaa aagtggcagc acagggaacc ctgaggaggc gagtcctgta ctcccaccag
                                                                     1980
cctatgttga tcagaggacc acagaccete tgaagacage aaaatgatta atatageeta
                                                                     2040
cttaaaacca aacaggaaaa ggaagctgaa ccagagacga actcgtcgac ccaggaattc
                                                                     2100
                                                                     2102
```

```
<210> 5630
<211> 4790
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4607)...(903)
<223> similar to gi5912263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5630 gaggagaaaa gaaagattta taattaaata gtatttaggg tcccaatagt cagagtccaa 60 taatccaaag gtcatctatg caaaattagg aatatgcatt tttctccaaa gagtatcttt 120 ggctttaatc tgattctcaa aaggatccta tgatccaaga aagtttaaga accattgaaa 180 cagtaattta ttcctgagct atttgactgc catcaatcca tttgttataa aactgaaggg 240 300 aaaacacaca tttgaatcac ttcttctaaa gctttagtaa gtgatctgtt caaataagca attacatgaa agaataaaac caaatttcca acctaaaatt ctgacaggag agtcaacatg 360 atggttaagg cctatttcat attcaaactt cagtctatga aagagtagag agagaagggt 420 ctcctcttc aaattaaata ttataaaaac aattaaaaaa aggtatcaat agtcctaaaa 480 tgcagcaact ccatctcaaa caagcatgac acacttctga tcagatgaag tatttacaaa 540 ggtagettgt gttttaagea tgtaacaett tgggtgaega eagaagttte teetetttgg 600 gtgaaacctg cctaaggctg tagagatgac caacactctg caggtgttag ttctgaataa 660 ctactgtggg cttttcatga tcttccctcc agtaggagac cacaattgag tctaaagtca 720 780 gatccaccgt tgtctatggg taggcagggt tgattcaaac ttaatccttg tttgtattct 840 tttggattac tgcaaaaaca tctagggacc agagtgaatg tctggtgagg cataactgca gaggtgaaag atgtcaaaca ttttcaattt ggcagtttct tcaaggtgtg tgaaaattca 900 catacagaag gtctggcagt gtcttctgta agttttcgtg ttgccgtatt tctgaaggag 960 ctcttgggcc tgctgctgca tttcctgggc cagacagcca ggaaagtggg acctgatgag 1020 aagcaggacg aggcagcact ccagcacatc tgggaagggc caggccttaa tgctctcagg 1080 aaattttgcc attctctgat ttgcctcggt aagccttttg gttaactcag gcagagaaag 1140 tggctcattt ttttcttctt tacactggct ctgagaactg cagaggggct gctctgcttc 1200 tacttccggt tcattcttat caggaccatt tgctgtggat ttacagagtt gactcttttg 1260 gtgttgtegg atcatttetg ceaaggtete ttggaettea geaacagtte tetgtgagtt 1320. ttggagactg gcatgctttt ctgaaaagag ctccttaaaa gtactcagca ttcgctcccc 1380 ttettetgtg agteteaagt etagttetga aggeetgttt ggetetgget gagaagttte 1440 agggtccgtt tettcagtge tggcagtgte taactgetgg ettggetcaa cagagagtgt 1500 1560 tetgtgacea geeettacee agacaetgga atttgggeaa ggtetggaga gagaecaeea 1620 gaattcatac agacgcccat aaagaaaaaa ggcctccaaa cttttgaaag ctggtgtggc aggggattga tggtccccca acttgtctct taggtggtca cagccatcag ggagaaaggc 1680 tgagtacact teetgeatga tggtgaaget eeetgagtea tageteegga eeacegeeeg 1740 aaggagegee tgeacageet egteecagga ggeeatetgt tggeteagea etgeeagggt 1800 caagtcatgg caaatgtgaa gcaggagctg tttggcaggt gtgttatttg tagcagatgg 1860 gtacttgatg ttctgcagct tctgaaaggc ttcctgatac tgctcagggg tgtcaaggct 1920 gaagatgete ttecacactg cagteaccet etecacgaaa ggeeettegg tgeeegtgtt 1980 ccaagtgtgg taagaggagg agettttgcc etetgaaage tgetttteet ecagatgeet 2040 ggacagtage tecagaagge aaaacaccaa tetetgacce tgtagacttt catgeagetg 2100 cagggettee tgggeteeca eccagttgtt ggecagaage agetettggg cacatetgag 2160 agccagggaa gcagacaact catcetetee tacgatggca gccaactetg cagcegttet 2220 aagtgatgee geateeeest ttttggeeaa aaetttgget geateataag cacaagtgge: 2280 2340 ccctaaatag catttggcag ctacagcata gtggccatct ctttctagga cggttcccca gctgaggtac .aagtccttca ggactgggtc ctccgggcgc agccgggcct tggcaatcgc 2400 aatagettee etgtaaaaat ggtttgaett gageagetee aeegetteat aeaetttgtg

```
gatggaaagt aggtgagaag cagcettgac atactgatcc tgaaaacaca getgtttgge
                                                                     2520
aaaagettee acageecata gecacacatg gtagecaget getggtgeca tagecacaag
                                                                     2580
gttgtctgtc agctcccctc tttctgctgc agtctggaga acacctttga gatccccttt
                                                                     2640
ccaaagcata agctggtgaa ataactcagg gtggccattt tctaagtgac cttttccttc
                                                                     2700
aatatcaatc attctataca gggtagccct gtctgtgaaa agccccagat gaaatctttc
                                                                     2760
ctcaacatca gcagacacat cttcattcag ctctctggag tgctttgcag ttgctagtac
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caaacagtcc tgatgaagct cctctttgga tctgtggtcc aggcttgtac tcaggggaag
                                                                     2880
caaggaacga gettteetet tettgattaa ggtttetgge ttetettttg gtggeteett
                                                                     2940
tttcagtaaa atgactttgt tattaatggt gacttttgac ttttcaaagc ctgaggaaac
                                                                     3000
tggagtgcag ataactggtt ctctagaaac cgctggagca aggccacagg gtaattccgg
                                                                     3060
ctcccgtgct tgctcctccc cttcttggtc tgacacacca ttctcaacag gtcctgagtt
                                                                     3120
etecticatg etitettett catticeate aategatiee agettiacag gagtieteaa
                                                                     3180
ggtgggcttt ttcttctttt tgggctttgc cttaggttga gagagccgtt ttttctccaa
                                                                     3240
ttcaatactt tttttgcctt gaggaggccg ggaatgatct tgcatggaag tgagccactt
                                                                     3300
gtgcacacaa aagtcatctg accectgaat agatgcagte tggatecaaa ggaqaecatg
                                                                     3360
ccacacaaag cagtcgacct tgatgtccct cggaaaattg ccacaggggc ctccttcccc
                                                                     3420
ggaaaagcaa tcccaacacc ctgggctgta cccatcaata ggaaagcaaa ataccagccc
                                                                     3480
ttcccatcaa tgaatgtggg gctcccacgc ccacactggg taatcttggg ccgtatgccc
                                                                     3540
ctgaggaggg gtccggtagg ggctctgtaa tgggtcactg ggagactcag gggctgcttt
                                                                     3600
ttatggacag tttttcaggt tgtggcacgt aaatggactg cattgttggg agccagaggg
                                                                     3660
cattcagata gctcaatttc tgggctgggc tgccatggct catgatgcca gctaatggta
                                                                     3720
ttcacaagct tgtgatgctg ttggatagta cagatcagtt tcaggttggg aattctgaaa
                                                                     3780
tatttctatt gatccatctt cattgccaag agccatgatt ttgccatctg ctttccaact
                                                                     3840
tatctctgtg tgtacaggca atttgtattt gattgaattg gtgtccctga tgagtttgtt
                                                                     3900
gatgtcaaag gcttctccac taagcttcca gggattatgc tgtaagacaa tcccttctcc
                                                                     3960
tecacagety tataaageaa gggaaggtet gteteettet eetecaagty acatgggggg
                                                                     4020
tactggtggc ccccaggcta acgtatatac agtettetta tgatatgtgc tagaaatetg
                                                                     4080
tggaggettg ttggagtagg tgtcatacaa teccaetttt ecatcatcag ttecaaaage
                                                                     4140
taagcaacct teettggttg ggtgecagea cagegetgta accttggaet teaegeettg
                                                                     4200
ccaaaaattt ttcacatcat agttgttctt tatggagagt gtattccata cacggatcat
                                                                     4260
gccatcccca acacctatgg ccaaagagcc tatgtccaca gaagagaaag ccaggctgta
                                                                     4320
tgcaaaccca ccaagggaag gaagggtcca gctgcactcc aaggtggcta tgtcccaaca
                                                                     4380
ttttacatct ctatccattg atgtagaaag taacagctgt ttgtcatcct ctgtttgtaa
                                                                     4440
aggacataaa ttaaacacaa ttcttgaatg attttgccct tctgatgagg cactgaagag
                                                                     4500
ggtgtatttc cgtctccaag attgagtgag atcccattgc aacagttcac ctccaaaaca
                                                                     4560
gctagatacc agctgtgttg gttgattgct gggccaatgg agtgtcaacc aaaggcgctc
                                                                     4620
tttaacagtt gggtctatac cccctcctct tctcttcaga aagggcaatt tcaaaatcat
                                                                     4680
cacccctcgg cctctagaac agctccagat tcgaatggtt tgatctttgc ttccagtggc
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taagtagcaa caatttgtta ctggagcttg tgctacagca ttcccgttgg
                                                                     4790
```

```
<210> 5631
<211> 4079
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (248)...(3126)
<223> similar to gi6002669 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<400> 5631 accggatgga gttccgggtc gacccacgcg tccgggctgc agcagcgcat tctggggcat 60 ggttcggcgg gggcgcggag ggctcggttc ggagggggcc gggagcccgg gcgccctgga 120 gtgaggagga ccgggagctg gctctggagg ctgcggaggc gacgccggag agaacgaagc 180 ctcggctggg agcggatctt tcgaagatgg tttggctgcc ttggagattt ggagatctga 240 tgccacgatg aggactcaca cacggggggc teccagtgtg tttttcatat atttgctttg 300 ctttgtgtca gcctacatca ccgacgagaa cccagaagtt atgattccct tcaccaatgc 360 caactacgac agccatccca tgctgtactt ctccagggca gaagtggcgg agctgcagct 420 cagggctgcc agctcgcacg agcacattgc agcccgcctc acggaggctg tgcacacgat 480 gctgtccagc cccttggaat acctccctcc ctgggatccc aaggactaca gtgcccgctg 540 gaatgaaatt tttggaaaca acttgggtgc cttggcaatg ttctgtgtgc tgtatcctga 600 gaacattgaa geeegagaca tggeeaaaga etacatggag aggatggeag egeageetag 660 ttggttggtg aaagatgete ettgggatga ggteeegett geteaeteee tggttggttt 720 tgccactgct tatgacttct tgtacaacca cctgagcaag acacaacagg agaagtttct 780 tgaagtgatt gccaatgcct cagggtatat gtttgtaacc ttaatactag gcgcggatgg 840 cgattcaaat acctgcacaa tcatcagccc accaactgta tggctttgct cacgggaagc 900 ctagtcctga tgaatcaagg atatcttcaa gaagcctact tatggaccaa acaagttctq 960 accatcatigg agaaatotot ggtottgoto ggggaggtga cggatggoto cototatgaa 1020 ggagttgcgt atggcagcta caccactaga tcactcttcc aatacatgtt tctcgtccag 1080 aggeaettea acateaacea etttggeeat eegtggetta aacaacaett tgeatttatg 1140 tatagaacca teetgeeagg gttteaaagg aetgtggeta ttgeggaete aaattacaae 1200 tggttttatg gtccagaaag ccaattagtg ttccttgata aatttgtcat gcgtaatggc 1260 agtggtaact ggctagctga ccaaatcaga aggaaccgtg tggtggaagg tccaggaaca 1320 ccatccaaag ggcagcgctg gtgcactctg cacacagaat ttctctggta tgatggcagc 1380 ttgaaatcgg ttcctcctcc agactttggc acccctacac tgcattattt tgaagactgg 1440 ggtgtcgtga cttatggaag tgcactacct gcagaaatca atagatcttt cctttccttc 1500 aagtotggaa aactgggggg acgtgcaata tatgacattg tocacagaaa caaatacaaa 1560 gattggatca aaggatggag aaattttaat gcagggcatg aacatcctga tcaaaactca 1620 tttacttttg ctcccaatgg tgtgcctttc attactgagg ctctgtacgg gccaaagtac 1680 accttettea acaatgtttt gatgttttee ceagetgtgt caaagagetg etttteteee 1740 tgggtgggtc aggtcacaga agactgctca tcaaaatggt ctaaatacaa gcatgacctg 1800 gcagctagtt gtcaggggag ggtggttgca gcagaggaga aaaatggggt ggttttcatc 1860 cgaggagaag gtgtgggagc ttataacccc cagctcaacc tgaagaatgt tcagaggaat 1920 ctcatcctcc tacatccaca getgettete ettgtagace aaatacacet gggagaggag 1980 agtcccttgg agacagcagc gagcttcttc cataatgtgg atgttccttt tgaggagact 2040 gtggtagatg gtgtccatgg ggctttcatc aggcagagag atggtctcta taaaatgtac 2100 tggatggacg atactggcta cagcgagaaa gcaacctttg cctcagtgac atatcctcgg 2160 ggctatecet acaacgggac aaactatgtg aatgteacca tgeaceteeg aagteecate 2220 accagggcag cttacctctt catagggcca tctatagatg ttcagagctt cactgtccac 2280 ggagactete ageaactgga tgtgtteata gecaceagea aacatgeeta egecacatae 2340 ctgtggacag gtgaggccac aggacagtct gcctttgcac aggtcattgc tgatcgtcac 2400 aaaattctgt ttgaccggaa ttcagccatc aagagcagca ttgtccctga ggtgaaggac 2460 tatgctgcta ttgtggaaca gaacttgcag cattttaaac cagtgtttca gctgctggag 2520 aagcagatac tgtcccgagt ccggaacaca gctagcttta ggaagactgc tgaacgcctg 2580 ctgagatttt cagataagag acagactgag gaggccattg acaggatttt tgccatatca 2640 cagcaacagc agcagcaaag caagtcaaag aaaaaccgaa gggcaggcaa acgctataaa 2700 tttgtggatg ctgtccctga tatttttgca cagattgaag tcaatgagaa aaagattaga 2760 cagaaagete agattttgge acagaaagaa etacecatag atgaagatga agaaatgaaa 2820 gaccttttag attttgcaga tgtaacatac gagaaacata aaaatggggg cttgattaaa 2880 ggccggtttg gacaggcacg gatggtgaca actacacaca gcagggcccc atcactgtct 2940 getteetata eeaggitgit eetgatietg aacatigeta titteitigi eatgitggea 3000 atgcaactga cttatttcca gagggcccag agcctacatg gccaaagatg tctttatgca 3060 gttcttctca tagatagctg tattttatta tggttgtact cttcttgttc ccaatcacag 3120 tgttagcact gaagctataa attacctggt cattttgtga tcacaagagt ctatgcaaaa 3180 aaaaaaattt ctttacccca gattatcaga tttttttccc tcagattcat tttaacaaat 3240

3300

taagggaaga tattttgaca caagaaagca ggaacgtgga gaaattggag caggaaaaga

```
aattatcaaa gcaataqaaa tagcttggtg gtcctatggt gtttttggaa gtatttggca
                                                                     3360
ttgctaattg agcagtccat atagtactac ttttagaaga aacaaaaagt ctgtttttta
                                                                     3420
aagtaatgtt ttttcttatg agaaaaaggt ttagatagaa ttgggtttta ttaatattaa
                                                                     3480
tttaatgcta ttagcaattt ccatatacta tattgtggaa aagactgaag aatacaattc
                                                                     3540
tgagaaatac aaaaaaattt taatggtata ctcatgttga aagataaatg ttgctaagtc
                                                                     3600
ctggtatgat ggtgtgagct tccttgggga agtacttctt gagttatgta actaacagga
                                                                     3660
tgttttacta cagatctgga tggctattca gataacatgg caaaaaatga tagcagaaga
                                                                     3720
tcattaaaaa cttaaaatat attttattag aaaacattta tctatgaatg aatatttcct
                                                                     3780
tgatgctggt ctctgcacac atatgcttgg ttacttgcat gcattcattg gttgttcaat
                                                                     3840
aagtgagatg attacagata acttaatact gtattttcct tatatggaaa accgttatag
                                                                     3900
                                                                    3960
acccaataac aactaaacct ttcaaaagaa aatattttct attatgaatg ttgattttca
taccaaagaa gatggagagt ctaaaatttg gatatgattc ttatgttttt ttaatagaaa
                                                                     4020
accttettea agtttatttt eetaaataaa eateataatt gtgaatttta aaaaaaaaa
                                                                     4079
```

```
<210> 5632
<211> 2276
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (116)...(15)
<223> similar to gi5080758 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5632
taattgggag aatactccag ccataagatc tgcatgcata gcatagcact ggcttctctg
                                                                       60
gactttgcac acctccagga gaagaaccca gaaaattgat cagttctaaa aaaccatgcc
                                                                      120
ccacttgttg gtgactttca gggatgtggc cattgacttc tctcaggagg aatgggaatg
                                                                      180
cctggaccct gctcagaggg acttgtacag ggatgtgatg ttggagaact acagcaacct
                                                                      240
gatctcattg gacttggaat ccagttgtgt gaccaaaaag ttatctccag aaaaggaaat
                                                                      300
ttatgaaatg gaatcactcc agtgggagaa tatggggaaa cgtatcaacc atcacctttc
                                                                      360
aatacaatgg tottggagac aatatggagt gcaaaggcaa ottagagggt caagtaagca
                                                                      420
agtcagaagg gctttacatg tgtgtcaaaa ttacctgtga agaaaaggcc actgaaagtc
                                                                      480
attcaacctc ttctactttt catcggataa ttcctaccaa ggaaaaattg tcaaatgtaa
                                                                      540
ggaatgcaga caaggtttca gctacctgtc atgccttatt caacatgagg aaaatcataa
                                                                      600
tatataaaaa tgetetgaag ttaataaaca caggaatace tttagcaaaa agecaageta
                                                                      660
tatttaacat cagagaattc agactgggtg agaaacctta tgagtgtatg gaatgtggaa
                                                                      720
aggeettigg tegtaettet gateteatte aacateagaa aatteataet aatgaaaaae
                                                                      780
cttatcagtg taacgcatgt gggaaagctt ttattcgtgg ttcacagctc actgaacatc
                                                                      840
agagagttca tacaggagag aaaccatatg attgtaagaa atgtggaaaa gcctttagtt
                                                                     900
attgttcaca atatactctt catcagagaa ttcatagtgg tgaaaaaccc tatgaatgta
                                                                     . 960
aggattgtgg gaaggccttt attcttggct ctcaacttac ttaccatcag agaattcata
                                                                     1020
gtggtgagaa accttatgag tgtaaggaat gtggaaaggc ctttattctt ggttcacacc
                                                                    1080
ttacatacca tcagagagtt catactggtg aaaagcctta catatgtaaa gaatgtggga
                                                                     1140
aagcettttt atgtgeetee caactgaatg aacatcagag aatteataca ggagagaaac
                                                                     1200
cctatgaatg taaagaatgc gggaagacct tttttcgtgg ctcacaactt acttaccacc
                                                                     1260
tgagagttca ttcaggtgag agaccttata aatgcaaaga atgtgggaaa gcctttattt
                                                                     1320
ctaattctaa tcttattcaa catcaaagaa ttcataccgg agagaagccc tacaaatgta
                                                                    ·1380
aggaatgtgg aaaggccttt atttgtggca aacaacttag tgaacatcag agaattcata
                                                                     1440
```

```
caggtgagaa accetttgaa tgtaaggaat gtggaaagge etttattegt gttgcatate
                                                                     1500
ttactcaaca tgagaaaatt catggtgaga aacattatga atgtaaggaa tgtgggaaga
                                                                     1560
cettigtacg tgetacacaa ettacatate atcaaagaat teatacaggi gaaaageeet
                                                                     1620
acaaatgtaa ggaatgtgac aaggccttta tttatggctc acaatactta gtgaacatca
                                                                     1680
gagaattcac agaggtgaaa aaccttatga atgtaaacag tgtggaaggc ttttattcgt
                                                                     1740
ggctcacacc ttacgaacat ctqaqaactc atactqqaqa qaaaccctat qaatqtaaqq
                                                                     1800
aatgtgggag ggcctttagt cgtggctcag aacatactct gcatcaaagg atccatactg
                                                                    1860
gtgagaaacc ctatacatgt gtccagtgtg gtaaagactt tagatgtcct tcacaactta
                                                                    1920
ctcaacatac aaggetteat aattgagaaa geettgaatg tgattaaatt taagaaaate
                                                                    1980
ttcatctatt tcatatctat aatgaatgta gaacatcttg cttctgctca gaactgctca
                                                                    2040
ttcttagaag gcctacttaa catggatgca gaataatttc agaaacccct taaataattc
                                                                    2100
cttaacatct ctataaacgc tagaatataa tgctgaatta tatcctttat taagcatcat
                                                                    2160
ctccatttca ccatatccta actgaaaccc tatatatttc ttgtgtgttc ttttctattt
                                                                    2220
gtaaatactg taattgtatt acatgactaa attatattaa tactataatt ccccgg
                                                                    2276
```

```
<210> 5633
<211> 795
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (292)...(12)
<223> similar to gi809078 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5633
taatctatga aatticggtt ttaaaaaatg tgttaagtct ttgtttttgg cctatcaggt
                                                                  60
ggtttataaa gaagaatgtt gaatgagcta ttgagaaggc tgtgtatccc gatgttgttg
                                                                 120
aggagtgttc tctatacctt cattagaaat tattgttttt gactgccttt tagtcctctg
                                                                 180
ttcccttact aatatcatct tgttttatta ttattacaga aagtggggta ttgaaatatc
                                                                240
ctactataat tatattgctc tattcaactt tgttagtatt tgctttatat atttgaaacc
                                                                 300
ccaatttgag acacacac gcacaaatac acacatggat aaacaaattt gtcataggtt
                                                                 360
tocatgaatt aatotatata tigittaatg toottottit tigaagtiit aacttaaagt
                                                                 420
acattttata aaatatgaca gettttgaet ttaacaatgt agettgtgta atattatttt
                                                                 480
gacctettet geteteattt tgttagtatt tacatgaaat ttetaettgg tettgeeact
                                                                 540
ttcagtcttt tcttatcatt agatctcagc tgactcttgt aaaaaggcaa gttgagtctt
                                                                 600
gatttttaaa attttttaat gagccttttt agaagtatgt ctcttgattg gaaagataat
                                                                 660
720
tettgtatet eegtgtetta attteteett tataagtttt ttttataaat gtgttgacat
                                                                 780
gctttgagct ttttt
                                                                 795
```

```
<210> 5634
<211> 4570
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(4571)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4545)...(329)
<223> similar to gi36110 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5634
ttttttttt ttgctacaat ttgtgcttta atagtcattt gttcctttat tggttcaagg
                                                                       60
gtcagtgttg gtgtggtcac tgctgagtcc actgtgccca gaagacaggg tccacagcag
                                                                      120
gcactccata aatacatgtt gcaggactgc cctcactggc tcactctgtg gagtgaggga
                                                                      180
cctaatgggc cccatttacc tattgcctct gaaagttaaa gggcaggaac aaggtggagg
                                                                      240
gccactgccc tetggcetgg catggcccag aggcagettg gggttagetc aaggcageta
                                                                      300
agcaggtcca gcccaagaac taagtcaagt gggccgagga ggctctgaga gtggccgggg
                                                                      360
ecengegtae aatteeetgg catggggtga gaacggggge tgttetggae geacatteea
                                                                      420
teteatgega getgetgggg cecaagttee atgtagggtt getggeaget geacataatg,
                                                                      480
ggtccccaag gaagtgagga cactatctgc tccacctccc cccactagta cttctgaagg
                                                                      540
tgggtcgcac ttgctgggtc tgcctcccag cattgctgca tcacttggta cagagaatca
                                                                      600
aggcaatact caggctgggg caggcgccga ccctggggcc cagaaagtgg gtaaggtcaa
                                                                      660
aagggtcaat gtggcggtat ggtggggcac cccgtgtcag cagttcccac agcagcacac
                                                                      720
caaatgacca cacatcagac ttggtggtaa atctataggt ctgcaggctc tccagcgcca
                                                                      780
tecaetteae aggtaggega gegtggegat getgttgaae actatagtae tecetgteea
                                                                      840
ggatgtcgcg ggccaaacca aagtcagcca ccttgactgt gaatgactcg tccagcatgc
                                                                      900
agttccgcgc agccaggtcc ctgtgcacaa acttctgctc tgccaggtac tccatgccgc
                                                                      960
gggctacctg caggccaaag ctgatgaggt ccttcacggt ggggttccgc tgaggtgagc
                                                                     1020
ggatgaactg gagcaggtca ccgtggcaca tatagggcag cagcacatgg ggcaggccct
                                                                     1080
caggtggcaa catgatacca atgagagcca gcacattcgg gtggttcagg ccacgcatga
                                                                     1140
gcagcccctc tcgcaggaag gcctccacct gctgcatctc tgtgatgcga cttagtgact
                                                                     1200
tgatggcaca ttggattcga ttctgggcct ggtctatgta ttctccgtgg tagacaactc
                                                                     1260
caaagtggcc tcagccaatg actcggtcac tgtgggtgac cacccgctca tggggaatca
                                                                     1320
gcaacatcct tgacctcaag ccaagagcgc agagtccagg tcccttagct ggatggactc
                                                                     1380
tttccgcagc agtggcacac aggattcatc ttcactatcg gagaaggatg ctccatggac
                                                                     1440
acaagtggtg gaatccagac catcaatggc agggagtgca aggccacttc tgtagtcaga
                                                                     1500
gcccgagtac agaataggca ggggtgtggc tccagcagtc tggtccaggg atgccaggtc
                                                                     1560
attcaggttg ggaggaagaa ctagctgctt cctccgccac cagtagctga agaccagtgc
                                                                     1620
agtegecagt geagecacaa geageageaa aggeageagg ataccaagga gegtgetetg
                                                                     1680
tgggacccca tctggccctg gccgcaccac tctacccagg atatgacatt caccatctac
                                                                     1740
gcagacetge aatggggcae cateetggee aagetgeagg gatgggggea gggggeagae
                                                                     1800
aaccatgtcc ccccggaact cgtgctggca gctctcacca cccacggtca cgttgatacc
                                                                     1860
cacacagtca gccacagcgc ccagcccaat atactcaaac ttaatggcat gctcctcagg
                                                                     1920
cttcagtgga actaggttgg cactgggtgg atggggtggg ggtaggaagc gaaagccagg
                                                                     1980
cagtgtaaag ccagcagete cateceeteg ggcaeteaga tteeetgeca-eccateeetg
                                                                     2040
ggggtetegg accacatatt caggaaggeg gcacagetge tgetetggaa getgeetete
                                                                     2100
acacctgctt tecactgeec taagecegte atggaatgae ageactaagt gecatgetga
                                                                     2160
agttagatgc tggccacaga tggtgatgtg ggagttgatg tagccacagt tggggctgat
                                                                     2220
gettageacg acagggtett etetgtactg gaaggtecag gaaccaggta cetgggcace
                                                                     2280
ccccacctgc aggctaaggg ggacactggc caccgtggcc ccagggggtg tggcacataa
                                                                     2340
aagetgeece teactgaece gtgetageag acaeteagte ecattgaeca geacageeeg
                                                                     2400
getggtgeet acagacagae tetggeette aagagtgaga caggtgeete etgeeegtgg
                                                                     2460
```

```
gccaaagagg ggttgcactg ctatcagcac tggctccatg aaagagaagc ctctcagcac
                                                                     2520
ggaggtgccg tctacccgga agtgcttgcc cggtggcatg ttagtcacgg tgaggctgac
                                                                     2580
gttggtaggc cccactgcct gggtgcccaa gggctccagt tcacactcaa actcctctac
                                                                     2640
aaagtettte eggggeactg gtetgagttt tgagetgtee ttgggeagtg geeggeaggg
                                                                     2700
actttggccc acagtgacct gatgggttcc ctcaggcacc agaccagaag ggtgaaggta
                                                                     2760
gaagttggag ccacacaggg tcagcettgt actgeceett agaggtecae tgtgggggtg
                                                                     2820
gaactcagta agcttaggtg ggcagtggtc ctgttgccag gagccaggac actccttctg
                                                                     2880
etggeegeae atgtteeeae accageeaea geecatgaaa tgeeatgeee ttaggeaaeg
cccacaggtc aggaagtggc ggcagccagg gcctcggata ggtacctgga aaacctggtc
                                                                     3000
cccagaggca aagagtaggt ggtccccaag acgactgaca tcccgctgca cgggctgccc
                                                                     3060
actgtcaccc agtgagaagt tggacacata cagcaagtag tttagtgacc tgaccagctc
                                                                     3120
cacctgcagg atacgcccat ccattgtgcc catgtgtgcc actgtgacgt tgtcaaggcg
                                                                     3180.
tgtcacatac aatgcagtga cctgtactgg tcccaacagc ccattgaata ggtccacacg
                                                                     3240
tgagaagctg ctactgacca gcagagggaa gtggcggcag ctggtgttgg ggctgagggc
                                                                     3300
ttccaggcca ggcgggttgg ggcaaaaact gggcgactgg aagaagtcga ggcctcgccg
                                                                     3360
gaggcctgga tggactgggg attcacaaca gcgctccaca ccctcatcaa ttagtgtgtc
                                                                     3420
cagcaggtca atggggaagg cacagacgac agagttgggg cccacgccag gaccaccatc
                                                                     3480
cttgccagte acaaagacee caaatagtae tteetggeee teggegatge teageteagt
                                                                     3540
ggcaagttgg gcacccactg gagcggagtg ggccacctgc agcacagggt agggctgtcc
                                                                     3600
gccttetggg gccccccggc gcctgcgttt tggagcaaat ctgcagtcga ggaccagetc
                                                                     3660
ccgatagtca cccaactctg gctcagtggc gctaagccgt gccaggcgtg tgtgcagggc
                                                                     3720
actaggatea tetgteaege tggeeggetg tacagteagg aagtataega aggeteeegt
                                                                     3780
gtggaagctg tgcacgtatt caatactgta ggagacaaga tgcttgggca gcactgacaa
                                                                     3840
cgccacaaag cccggtgcga atcccgaggc gtcagccttg agacgcctga tagacactga
                                                                     3900
gcgtgggctg aagctgccag ccacggctgc gtccagtgag gatgccacgt agaaatagga
                                                                     3960
ggcctggcct tgctcaacca cagttacacg ggtgcccaat gggctggcca cacagtcggg
                                                                     4020
gcagtcatcg ggccggttat ggtgggctga gaagaggcag gctggcgctg ccagatgcac
                                                                     4080
ggetgteeet tggggeteta ggteatgeag gaageagegg ceetgeagge tggageeaca
                                                                     4140
actgaccage geaggeageg egggateeag caccageace tttgtgtetg tgteaceggg
                                                                     4200
agggccgtgg ggtcctgggc cacaggctgc acacgtctgg cagccagggt ctccagcagg
                                                                     4260
gcccgtggcc aggctctgga cagacttcag gtcaggccca agcacatgca ggcgattgcg
                                                                     4320
tatggctaca aacacagcac teteatttet gtegeeeteg taggtcacca tggeetgtac
                                                                     4380
caggeeteeg geggagaage tgggeaceae gtaetteaeg teaaagtege gagaggeege
                                                                     4440
gtagggggtg cgcgggcact gccagtcctc gcccgccgcg ggcttggcag gcaacagcag
                                                                     4500
cagcaacagg aaggactgag gcagcggcgg gaggagctcc atcgaggcga gctgggaccc
                                                                     4560
tagaggatcc
                                                                     4570
```

```
<210> 5635
<211> 1949
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1813)...(335)
<223> similar to gi4309889 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5635
tttttttttt ttaaaaactt ttaacaattt attagtctta ttttccagta aaatattcac
```

```
agagatgtca aaagaatgag atggtgagcg atatagccaa ctacctttaa ttaattccac
                                                                    120
ataaatagtt aagatetaaa aaceteagat gageagaeeg agtegaaatg tgattettea
                                                                    180
aagcaagtat tgctttaccc tgtgtcctgg aatgcagtcc gtcgatatga ccactaactt
                                                                    240
gcatgtgacc aaatgtttgg agagtgtttt ttaggatatg gctctcgggt gaggccggtc
                                                                    300
atcccgtcaa tccaaggaag gaaggatgtt gttggaactg cggttggcac caaggtttct
                                                                    360
tggacctctt tcattttact tccaatcagg gtttggcatt ttttttggat ttcaaaatta
                                                                    420
acataggggc tcccggccgg atcagacttc ctttccaaca accccagtaa tcactcaagg
                                                                    480
cccttcaaca atgatetece teatetteca eccaetetgg ggtaaaggte actgttggat
                                                                    540
ggtcaccgag gaatcttcat ttaaatccgg gtgcacggaa gtgagcggac acgctggggc
                                                                    600
gttttcctca tgtgaactgt gctcttctcg gcgagattca tgtggttgaa gtagataaac
                                                                    660
ttaaactggg gttcctttcc tcagaccccg gaacatcccc cttgttgatg ttaaaactgt
                                                                    720
tccacaagat gtccagaggc ccagccactg tgaagctggg gccccaacga tgctgtccca
                                                                    780
gteettegge aaaaaaeeea aegttgggtg gacagaggeg tegateataa ageacacage
                                                                    840
cgcactcatg gccttataaa cggattaaat ggagctcttc ataagtgtca tctgtattta
                                                                   .900
caaaaatttt ggggaatctg cattttgcat ctggatcatt gaggttcaag ggtccggtaa
                                                                    960
                                                                   1020
gaaatettee atagtgttga agattteetg geatttetge tettattgga gaateeette
                                                                   1080
ctgctaactc aggttcggat gtgccttggg aaaagggagg tggtaaggta tttgtataaa
atticticatigt catcitigtto taatccacto cagatgagot gatcgttata gagaaaagoa.
                                                                   1140
gtgtatttga ctatattcag gctttcctcc attcgtatta ataaaggact ggattttcaa
                                                                   1200
ataagtcatt ttatccaacg ggaagaagct gattccacca aaaatgtcaa gtaggtcaca
                                                                   1260 ...
tgactgcaaa tgtagcgttt gcaaataccg atggaagaat ttctctaatc tttctttcag
                                                                   1320
aagettgaeg eeteegtett eeatggettt eaggaaatgt accattaaaa agettgtaca
                                                                   1380
tgctgtagca ctgccgcagc accgagctat aaaccttgtc caacaactcc tcctcttgga
                                                                   1440
tattcaataa ctggttttcc atctttactc tgtttttcaa ttataggaca ccgaacaacc
                                                                   1500
atgaccatcc aagaaatttt cttctggttc aattgaagaa ctgtctgttc ttctgtgtat
                                                                   1560
gtaaagattt tgcaggtttt gatgggctaa atgtccttgt aaactgtaca atagcttcac
                                                                   1620
1680
tettatttte eteetgteet tegegeggee egaagegegg gttgtagatg aagaaactea
                                                                   1740
geagegeegg egggaaetge tteteetggg eegeeeaggg eeegeteeeg geeeeggeeg
                                                                   1800
tegetgeget geagecatee tggeceggee eccaceteag gaageeteee aeggeeegee
                                                                   1860
cagagaccga gaaaatctct taatttcagt ggaactcagt ttgtttctct ttttaaacat
                                                                   1920
tgccagttat aaatgtattt tattttaaa
                                                                   1949
```

```
<210> 5636
<211> 947
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (290)...(191)
<223> similar to gi2276308 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5636
attctatccc ggtccacagt ttaggaacca tggacaaaag tccaaggacc agaggcatgg 60
agttttcatt agaaggttct gaattcatct aatggctggt tatttttaca gatgccaagt 120
ttacaaaaca tacaagtgca cagacaggtg tgggaggtag ctcgaaatat acagagtgtt 180
cgcaacacta gagacgtctt ctggctgcca tcaggggact cggaggtagg gtaggcttgg 240
tgaggcccgt ggcttgtgtc cgtggcacag cctcctgcaa aggggctgcc ctgctccct 300
```

```
360
gttcccatgg tgccaggccg tgctccccag gtgcctccgg ggtgctgaag atcttttcat
agtactcgat cagcagttca gtgaacatgt tcaggggcac aagggcactc agggaggaga
                                                                      420
ccccctggga tggccagatc aaattcagcc cgaagacaca ggccaggtta gagctgttca
                                                                      480
ttttgttgaa gatgetetee egggacaeeg catgeaggaa geeeatgagg tageggagga
                                                                      540
cgacgtagtt gtgctctggg aggctccgta agatctggcg gcagccagtg acacgcaggc
                                                                      600
tgctctccac acctggaagg gcatggggct ccctgctgag ctccagaggg gccaggggca
                                                                      660
gcgaggtgat cccgagaatc tgctcgtagg cctggaaggt cagaagcggc tggggcagct
                                                                      720
ctcgcaggaa ggtcttcagg atcacggcag ggatgtgaat gtccccgtag tcgtcaaagt
                                                                      780
                                                                      840
teaegggett ecettggttg tagageetet ggatetegeg gaeggtetge aegetggegg
                                                                      900
atctccggaa caggccctcg gtgcgcaggc ctttctctct caggtacgtc actgtgaacc
tcagcacagg ggggatgagt tcgccttgat ttttgtcttt gaggtat
                                                                      947
```

```
<210> 5637
<211> 1749
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1713)...(331)
<223> similar to gi38262 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5637
caatttctga atagcaactg gaatattcaa ccaacaatgg tcatggtcag ttttgtattt
                                                                    60
tttccttaac ttatatactt cattetttcc aactatttta aagctaaatc ttttttaaaa
                                                                   120
aagttttaaa aataagtcac aggcaaatca tgaagagttg ggtttatttc aacagtaaat
                                                                   180
ctgaaactct tgccttaagc aagagtacta cagtaattat atcaggaata gacaatttcc
                                                                   240
tacactgtca aatatataaa agttcctttt gcactttctt caacactgat caacaagcag
                                                                   300
atteagteea catttgettt gatetaacta etgagttaac ceaagettet tetteagaga
                                                                   360
ctctggcatc tcgggtggag gagggcgagg aagtctgaag tagaccttca cggagtcata
                                                                   420
gataaaccac tgtagtgcag tcagggtacc aatcatgatg atacgggcaa acagtccctt
                                                                   480
ccatacacct ttaaatccaa gtctcttgag gaccagagaa gcactgctac ctttttcttt
                                                                   540
attcaacaca gataccacag aatcagcagg gtgagaaaca attgcacaaa agactccagc
                                                                   600
tatgtaacct gctacaaatg ttacaaccag ctgctctggc tttgaacatt cactgcgggg
                                                                   660
cttaggaacc acaaacttgt acagtgcttc aacagtacgt tcaaagcagg cgaacttcat
                                                                   720
catggtgtat ggtatctgtc tcatccagag aggagcaacc cccttgtaga atgcttttag
                                                                   780
gccttcttcc ttatacattt tgggagctgc atccctcaaa gtgttggcat aacctggctg
                                                                   840
ggtttgaatt cgaaccttag cagcttccat aggagccagg gcaatgtcag caaagaattc
                                                                   900
960
aagcatattg cetatacaag cetttaaaga etteataaaa gecaaaettg cagagteeet
                                                                  1020
gcatggagta gccaaggaaa gtcggagccc atcctttagc caaaccacga acaccatcct
                                                                  1080
ctttaagtgt aactgagaat ccgttaaata tgcccttgta cttttggggg tccacctgca
                                                                  1140
tacggcattt cactaaatcc aggggaacca cagcagtgtg tgtcagacca caacttaaga
                                                                  1200
ccccaccaaa gccacacagt gcataatact tcgcggagcc aaattcacaa ctgtactctg
                                                                  1260
tagtaagaga agacacacca tgcattttaa tataaaactc atgttactgg tcataaactt
                                                                  1320
acctcctgga cagttaggtt tccacacagc ttgttagatg actatatctt ataacttaac
                                                                  1380
agtcagtcat gcttcaatat gctctagtcc agcatgcaaa acaaacctgc attctgcatt
                                                                  1440
taaccagate tagaggaace aatgetgtat gtgttgtgee acagetaata attectecaa
                                                                  1500
gtccacaaag gataaagaat ctgccagatc catagtcaca gctatactgc tcttccacqq
                                                                  1560
```

```
cggcggctgc caggttgcga gggcggcggg gctggcccgt gggccctggg gagctgctgc 1620 ggaggtcccc gagaccatcg tgcaccagct gcagatgtgg cgtgttgaag gggttcgccc 1680 gcgccaggtg cgccacggac gagaacatct tttccctaag atggcgatca cacaaccact 1740 cccttggaa 1749
```

```
<210> 5638
<211> 1600
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1582)...(1283)
<223> similar to gil419759 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5638 tttcgtgtcc gtggcggctg cacgagcagt tcctgtgggc agtgggctca ggggcctgca 60 acggacceta cetettgtag tgattetegg ggecaeggge aceggeaaat ecaegetgge 120 gttgcagcta ggccagcggc tcggcggtga gatcgtcagc gctgactcca tgcaggtcta 180 tgaaggccta gacatcatca ccaacaaggt ttctgcccaa gagcagagaa tctgccggca 240 ccacatgate agetttgtgg atcetettgt gaccaattac acagtggtgg acttcagaaa 300 tagagcaact gctctgattg aagatatatt tgcccgagac aaaattccta ttgttgtggg 360 aggaaccaat tattacattg aatctctgct ctggaaagtt cttgtcaata ccaagcccca 420 ggagatgggc actgagaaag tgattgaccg aaaagtggag cttgaaaagg aggatggtct 480 tgtacttcac aaacgcctaa gccaggtgga cccagaaatg gctgccaagc tgcatccaca 540 tgacaaacgc aaagtggcca ggagcttgca agtttttgaa gaaacaggaa tctctcatag 600 tgaatttete categteaac ataeggaaga aggtggtggt cecettggag gteetetgaa 660 gttctctaac ccttgcatcc tttggcttca tgctgaccag ttctagatga gcgcttggat 720 aagagggtgg atgacatgct tgctgctggg ctcttggagg aactaagaga ttttcacaga 780 cgctataatc agaagaatgt ttcggaaaat agccaggact atcaacatgg tatcttccaa 840 tcaattggct tcaaggaatt tcacgagtac ctgatcactg agggaaaatg cacactggag 900 actagtaacc agettetaaa gaaaggtatt gaggetetga aacaagtaac taagagatat 960 gcccggaaac aaaaccgatg ggttaaaaac cgttttttga gcagacctgg tcccattgtc 1020 decetgtet atggettaga ggtatetgat gtetegaagt gggaagagte tgttettgaa 1080 cetgetettg aaategtgea aagttteate cagggeeaca ageetacage caetecaata 1140 aagatgccat acaatgaagc tgagaacaag agaagttatc acctgtgtga cctctgtgat 1200 cgaatcatca ttggggatcg cgaatgggca gcgcacataa aatccaaatc ccacttgaac 1260 caactgaaga aaagaagaag attggactca gatgctgtca acaccataga aagtcagagt 1320 gtttccccag accataacaa agaacctaaa gagaagggat ccccagggca gaatgatcaa 1380 gagetgaaat geagegitta agagaeatgi eeagiggeet tiggaaaggi ggiggggate 1440 cagttcagga gggaggggta tgtttgtctc ccagtctggg caaaggagtg ctatgcggaa 1500 ttctctgcat agcagaaaag ctcccaccat tttcttttga tgtggtttta aagtctcacg 1560 ttctctataa tagaaacagc aggtcttgtc agctccttgt 1600

```
<211> 4405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4406)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(4406)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4312)...(2392)
<223> similar to gi30866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5639
cgggcatggt ggtgtttgcc tgtggtccca gctacttggg aggctgaagc aggacgatcg
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ggtgagetga ggcagtegag getgeagtee tegagtggge teaggagaag egtaagetga
                                                                      120
gegtigtigea tatteaegga gtetaeaeea accetagtigg cattigteett cateeggetig
                                                                      180
gatatcagaa cgtgctcagg aacactgaag tcatgagaga aattcagaaa ctctacgaaa
                                                                      240
acaagtcatt tetttteetg ggetgtgget ggaetgtgga tgacaccaet ttecaggece
                                                                      300
ttttcttgga ggctgtcaag cataaatctg acctagaaca tttcatgctg gttcggagag
                                                                      360
gagacgtaga tgagttcaaa aagcttcgag aaaacatgct ggacaagggg attaaagtca
                                                                      420
tetectatgg agatgaetat geegatette cagaatattt caagegaetg acatgtgaga
                                                                      480
tetecacaag gggtacatea geagggatgg tgagagaagg teagetaaat ggeteatetg
                                                                      540
cagcacacag tgaaataaga ggctgtagta catgagcgag ctagagaaat caccaccgtt
                                                                      600
tagaccaage tgtaaggeee tactacagae agtgtttaae aagtaaaett tacaagaace
                                                                      660
caacacaatt ccccagaaag taacaatagc cagaggttga agggcggggt agaagagggg
                                                                      720
ggaatgttgc aagegtaate etteatacea ecetggttet tggatattet geegeetgtt
                                                                      780
caagttcaag aataaaagcg aacagcagga ccccaaatgc agctccccaa ccccactccc
                                                                      840
ccaggectag acatgecttg tgteccacae ageacaeeca atgtgataet teccaetgae
                                                                      900
ccggctgcag ctdtgcatga aggactcggg gtcctggatg cccatgggaa tcactgtggg
                                                                      960
ctcttgttgc agttttgtac ttctattact tggttttttc aattaagctt aatggctttt
                                                                     1020
ttaaaaacat gacttgaagc tctagttttc taggaccttt tacagtgtta cagtattttt
                                                                     1080
acataactaa geetgtattt aaaagettgt ticatttaeg tigecaggae eetggeteta
                                                                     1140
cttttagagc tcattgtaag aaactctaac ttgcatcaag gtactaataa gcttaatttt
                                                                     1200
aataacccaa agtttaaagg ttccgatctt tctccttggg gtggagtgat ctcattctca
                                                                     1260
ggacaaccgt ttacttacct gattcctcgg agcattatca acttctgctc tgttgtcctg
                                                                     1320
accatacata tgtcctagaa ctacagttaa gtgtgttgtg gaattttagt tttgaatcct
                                                                     1380
gtataagaga actccaagac ctaaaaggca atttatttat gaaatttatt ttcttatata
                                                                     1440
aattacttat ttctctgggc agacagcett cacettattg cactaatage acatetgtaa
                                                                     1500
tatcaagcta caggacaagt cttaacaaga ggtttgtgtt cttcaatgta gcacttgtct
                                                                     1560
accaggcact gtagagggga gtgatgagga aaagccagga ctgcttagga ggtgaaggat
                                                                     1620
gggaggggag ggggtcatca tacatcette tgacaattgg ttteeteeca ggaaggggaa
                                                                     1680
catgcagage ttacttetgg attetgggag tgggaagagt tgggaggeea agaageecaa
                                                                     1740
tgcaacgctg cagctgagct ccttttattt ctgagggaag caaggactca tcttttgctc
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attigtaaca aatcactcca gcctagctga tgctttgggg taaacaatgg agtaggagtc
                                                                     1860
atcatcagaa ttagaattag cagcaattaa caggcaatac actgccacag tgaggcgggt
                                                                     1920
gtcatccagg tcctggggac ctgcaggctg tgtatcctag ggagaggtgc cattcaagac
                                                                     1980
ctggcgctgg ctctggaaga gtctcttaac ctaatgcagc tgggactcat taggctcaga
                                                                     2040
eggetettga ecacactaat tattageaaa getétggtgt tgggtteeaa ecattggtea
                                                                     2100
aagctgtaat aagactgagt ctgtaggcag agtgaagggg gtgcctgagt aggaaggggg
                                                                     2160
aggcccgctg ggagagggtc agtgggcagt gattgtaaca tgattaggcc ttccttgcag
                                                                     2220
atggcggctg tgctgaacgg ggagtggggt tggaaggagc cacaagcccc ctcactctgc
                                                                     2280
```

```
ctttgtacta cactgaagac aggttgctca catactctaa agcacattct tgatacagga
                                                                     2340
agaagggctt gtggggaaag cggcgatttg gtattgggca agagccacgt taagccttca
                                                                     2400
tgagggcagc caccacagcc ttggcattga ggctgcgtag gtcacagtag gtctggccgg
                                                                     2460
tgcccacaaa gacgatgggt ttgcttgtga tgtacgtcat agaaatagca gctcccacct
                                                                     2520
tgtcatcaat ggaatcaaat ttggtaagaa caatgccatc aatgagccga ggtgtctgag
                                                                     2580
ccatagaatg gtcagccaag gctctgttga acttgaccag ctggtccacg gcttcattgc
                                                                     2640
ctactaaggc ttctcctaca aacagcacca aatcaggtgt attgacagta atgagtttgg
                                                                     2700
ccagggcagt catcagaggg gcattgtctt gcatgcggcc tgccgtgtcc accagcacca
                                                                     2760
cgtcaaagcc ttggttacgt gcaaaagcaa tggcttccat ggcaatgcca gcagcatcct
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tgccatagec ettttcaaac aactgcacca tggtgeggee accatgette tetggagggt
                                                                     2880
gtagggcact caaacgccgg gtgtgtgtac gcagctgctc cacggcccca gcacgaaatg
                                                                     2940
tatcacaggc agcaatgagg acactgaagc cattctctaa caaccagaag gaaatcttgg
                                                                     3000
caagattagt agatttcccc actccattaa cgccgcagaa ggtgacgaca taagggcgct
                                                                     3060
tggcgacgct gggcatccat gatgtcccgg agcatgtcta cacggacgct gtggctgcac
                                                                     3120
gaatetgeae cagggaetee tgtagggett getttaetgt ggaagteaee gtgetgaaeg
                                                                     3180
tecceateae ettecettee aacttgttgg caacagatte acagagetgg acggeaatgt
                                                                     3240
ctgcagccac gttcttagca atgagatgat cacgcatctt gtccagcaca gattccatgt
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cttcacgact caagctcttt gaacccacaa ggcccttcag cataccaaac atgccaccca
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tgctgcagtc cagatcctga agctgccccc cagacccagt ccctcgaatc aggttgatgt
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ctttgttage acagecacce agtteccaca eceggggtge ttttttgeec ttetectttg
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gagcatetga ettegtggae ttgttggaet tetecatace ceteceatge ttetgaatga
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actectegeg ettectgegg atcagetect etttggaaag ttetaceteg ttetcaggae
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ccactggaag acctgacttt tctgcaggga ctggtttgct ggtagccaaa ggaccatcag
                                                                     3780
aacctteett ettggeeee ttttttttge tattetttge ttttteettg ggetttteee
                                                                     3840
ecegtgtete aateatggae eteacaggtt tettggeett tteagaatet teaaatttet
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tcatggtagt gggagcacgg atcttactgc tctcctctgc ttcacgaagg agccgcagga
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agtcattttg gaaatcaaaa gtgcccattt aataaacttt aaagccactt tgctgttgga
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tetetgtgeg gtaettgtee egaaacagee gatgeaegte atetateaat ttgtetacat
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atgtcagtgt caggatette tgaaaaccaa ccacaaacac cagetcaaac tggttgteca
                                                                     4140
gtttatactt gagtgtgagt gcctcatggg tgaaagaagg ttgttacctc nececqttce
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tgcagcagca cggaacgaat caacgcgtta acgggtccgg tgcatgagtc gctaacgccc
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tggaagcacc agagcacaag eccgecettg gagaaaatgg tgaagaaagt egagcatgge
                                                                     4320
ggcagcggca gaggagctgg ggccggcgcc gggaattcag gccgcgttcg ccgccgcttc
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ctgctgcgcc aagcgcggga cacgt
                                                                     4405
```

```
<210> 5640
<211> 7027
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (70)...(2426)
<223> similar to gi4688902 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5640
gggcggccgt tcccccgcgcc ccctcgcgct ttgcccaggc tccccctgcg aggccggagg
```

```
120
caggatggaa gatggactgt ggatttcgag gagtgtctga aggacttcgc cccgcttcag
ggcagctttg gaagaagtag aaggtgatgt ggcagaattg gaactaaaac ttgaataagc
                                                                      180
ttgtgaaact ttgtattgcc aatgattgat actggaaaag ccttttgtgt tgcaaataaa
                                                                      240
cagttcatga atgggattcg agaccetgge teagaattet taataatgat gettgtegtt
                                                                      300
gagaccaagt ttgccccaag ttttctggac agtcttcaag aaatgataaa ttttcacaca
                                                                      360
atcctgtttg accaaactca gagatcaatt aagggcacag ctttcagaac tttgttaaag
                                                                      420
aagatettag aaaatteaaa gatgeeaaga ageaattega aaatagteag tgaaagagaa
                                                                      480
agaaaattgc gttagtaaaa aatgccccag tacccagtag accagccagc ttggagttgt
                                                                      540
                                                                      600
agaaaccccc caacattctg acagcaacaa gaaaatgttt ccgacacata gccctcgatt
atgtgcttca gattaatgtt cttcaatcaa aaaggagatc agaaatccta aaatcaatgt
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tgtcatttat gtatgcccat ttggccttct ttcatcaagg atatgatctg tttagtgaac
                                                                      720
ttggacceta catgaaggat ettggtgcac agttggateg actggttggg gatgcagcaa
                                                                      780
aggagaaaag agaaatggag caaaaacatt ccaccattca acaaaaggat ttctccaggg
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                                                                      900
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tgttcaaacg agccagcaat gccttcaaaa cttggaacag gcgctggttt tcaatacaaa
                                                                      960
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                                                                     1020
                                                                     1080
tcaggctttg cacagtgaaa cattgtgaag acatagagcg acgattctgc tttgaggtgg
tetegecaae aaaaagttgt atgeteeagg cagatteega aaagetgege caggeatgga
                                                                     1140
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aagctggata agaaatcatc tccatccaca ggaagcctag attctggaaa tgagtccaaa
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gagaaattat tgaaaggaga aagtgcgctt cagcgggtcc agtgtatccc tggcaatgcc
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agetgttgtg aetgtggeet ggeagateea eggtgggeea geateaacet gggeateace
                                                                     1380
ttgtgtatcg agtgctccgg aattcaccgg agccttgggg ttcatttttc aaaagtacga
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tetttaaett tagacaeetg ggageeagaa ettttaaage ttatgtgtga gttggggaat
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gatgttataa atcgagttta tgaagctaat gtggaaaaaa tgggaataaa gaaaccccaa
                                                                     1560
ccaggacaaa gacaggagaa ggaggcatat atcagagcaa aatatgtgga gaggaaattt
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ctaaaagttc tgaagaaaag aggctgagca tttctaaatt tggccccagg ggaccaagtc
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gatggaagag aatetttace etceaeggtg teagecaata gtttatatga geetgaagga
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                                                                     1920
tatagggcgt catatgaaaa aaaccttcct aaaatggctg aggctttggc tcatggtgca
                                                                     1980
gacgtgaact gggccaattc agaggaaaac aaagcgacac cacttattca ggctgtatta
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gggggetett tggtgaegtg tgagtteete etacagaatg gtgetaatgt caaccaaaga
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gatgtccaag ggcggggacc áttgcaccat gccaccgtct tagggcacac agggcaggta
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aattttggta gatattgaat ggcttggaaa agaggtaccc attcatatat ttataaatta
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ggggagtagt tatctagtag taggagagga acctagttta ggacctcttt tatttaaaaa
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agcctattta aagggctaat ttctggtaga cagaagttca gtctagattt aggccatctc
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cattgatttt tttcctccat gcatcttgcc caggatcact cagtcaagca tgtcttcatc
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aagtggaage caactgteet geetgeetea agaatatgtg ttttetttag etteeetgag
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gatttttggt ggttcagaaa taggtgtgtg tgttgatgtg tttttggtaa cctagctttc
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atacacataa tatatgattt attagaacta gagaatgtgt tttccccgtt tgttcataaa
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tgcggtcggt tatacttttt aggtgacagg ttattgtcca gtactttaaa gtaagtatgt
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                                                                     3180
attgttgggt tgattcccca aaaccttgac agatgtatcg atggaataaa agtatgtttt
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ttataaaatc atgtaggcca tttttatatt tgaaatttgt ccttttaaag atagttttgc
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tgttgctcct agtgaaagaa aaatctctgt acaaaggaga aaaagaaccc cacttattct
                                                                     3420
tagttaatac taaaatatat agcaataaat tgctgtttat tttttctaca tctattttgt
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```

```
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ttacatgatt cacagacccc tgaattccaa aatattatgg ataaacatta ccatttatat
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gctacaaatt agtctgattc catctttgaa aatgtcttaa agtataaaat aattaatttg
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geacquitete ageteactge agectectee tettgggtte aageaattet cetgeeteag
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cctcccgagt agctgggact acaggcaccc gccaccattc cgagctaatt tctatatttt
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tagtaaagac gggtttcacc attttggcca ggttggtctc gaactcctga cctcaggtga
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cccttcctgt tttaattcct aaagatcctg acttttatct gaggaagtct aggtagtttt
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gttacaaggt aggttggctc ttaggtgaat ttagccatgt caactaatag cttttatatg
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                                                                     5280
gttaataaaa tgcaatttca tgttagagct agaataaaag taattgagca gtcatttgca
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cagatttaat ttggaatatg aactttggtt cttcatgagt gcattttgaa aaagaaaaaa
                                                                     5580
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aagtatggtc gcagtaaatg aaattgtgtt taagactaaa tttactaccg ttttgaacag
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acattcccag atcattctta tattgtcaga taacacttgt gtataatatc actttggatc
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aaccgcatga tacggtggaa ggagcactgg actagtcgtc actacccttt ttggattcag
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                                                                     6000
gtaggatttc tgagatctta atctaagctc caaagttgtc tacttttttg atcctagggt
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gctccttttg ttttacagag cagggtcact tgatttgcta gctggtggca gaattggcac
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cattacccag gtctgactga ccaccagtca gaggcacttt atttgtatca tgaaatgatt
                                                                     6180
tgaaatcatt gtaaagcagc gaagtctgat aatgaatgcc agctttcctt gtgctttgat
                                                                     6240
aacaaagact ccaaatattc tggagaacct ggataaaagt ttgaagggct agattgggat
                                                                     6300
                                                                     6360
ttgaagacaa aattgtagga aatcttacat ttttgcaata acaaacatta atgaaagcaa
aacattataa aagtaatttt aattcaccac atacttatca atttcttgat gcttccaaat
                                                                     6420
gacatctaca gatatggttt tgtggacatc tttttctgtt tacataaatt tatccactta
                                                                     6480
aaatgtgata atgtggagac aaagcaagat ttgattacat aaacttttct ctgcattggt
                                                                     6540
cttttcacta tcttatttgc taacttttct tatttttctt caacctcccc accctccatt
                                                                     6600
ttttggatat taaacaggga aagettgeta cattataaag attgttggca ccatttatit
                                                                     6660
tacacaaagg ctaaaggtta acttttggaa atgatgagct acttttatat atgtgtttac
                                                                     6720
tcatgctttg tgatatttct ggatcattcc agtcataaag acttattaca tgtactattt
                                                                     6780
cttgctacct gtgaaaaggt atattttaaa gaatgtataa ccaacagtcc atttactttt
                                                                     6840
tattagtatg tagaggattt gtatctaatt catgaatgta gttttacagt agtttgtcat
                                                                     6900
```

tgtaaatgga gcaaagtaca ttatcttcta aaatgtacat tatgtaagaa ttgtaaatat 6960 acttaagtaa tttgtatgcc aaaaaattac aataagtcaa taaagatctc acctctgaaa 7020 aaaaaaaa 7027

```
<210> 5641
<211> 3844
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3845)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (893)...(3611)
<223> similar to gi3413882 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5641 aaaaacggac cctcattaac agaagcactg gaaaacgctg gaattttcta tgaagcacaa 60 tacaaagaag taaaagtggt ggctaatgca tataaaacct ttgctaaccg agtaaacaat 120 ttaaagaaga agttggatca attgaagtca accettccag atcetgaaga atcaccagtt 180 cettececaa geatggacge teecteeceg actggttetg agteteettt teagggaatg 240 ggaggtgagg aatcccagtc accaaccatg gagagtgaga aatctgccac acctgaacct 300 gtgacagata atcgtgatgt ggaagacatg gaactctcag atgtggaaga tgatgggtca 360 aaaatcattg tcgaggacag gaaggaaaaa cctgcagaga agtcagctgt atccacttct 420 gtacctacaa agccaacaga aaatatctca aaggcctctt catgtacccc agtgcctgtg 480 accatgacag caactccacc tettecaaag cetgtgaata ettetette ceetteecca 540 gcattggctt tgccaaacct ggctaatgtg gatctggcaa agatcagttc catccttagc 600 agtttaacat cagtcatgaa aaatactggg gtcagtcctg catcaagacc ttctccagga 660 acgcccacca gcaacagcat cctcaccagt ggcctgaaaa cacctgcacc tgccacgaca 720 acateteaca accetetgge aaatateete tecaaggtgg agateaceee agagageatt 780 catgicigca citticcaaaa cccagacaca gicagcccci gcactgcaag gcctgicatc 840 tttacttcag agtgttactg ggaacccagt tccagccagt gaagctgcct cacagagcac 900 ttcagcctcc cctgccaaca ccacagtcta taccataaag ggaagaaatc tgccctccaq 960 tgcccaacct tttattccca aaagcttcaa ctattctcct aactcatcaa cttctgaagt 1020 ctcttcaact tcagccagca aggcctcaat tgggcaaagc ccagggctcc caagcactgc 1080 ttttaaacta ccttccaaca ctaaggggtt tacagctacc cacaatacta gccctgctgc 1140 cccacctact gaagttacca tctgccaatc ttcagaggtc tccaagccaa agctgggagt 1200 cagagtecac ctccccaage ctgggaaatg aagattcaca acttettaaa aggtaateet 1260 gggttttcag tggcttaaaa cttaaaacat cccaatcctg naggcagttt ggggtccagc 1320 gececateag agagecatee eteagaette cagegtggee etactageae eteaategae 1380 aacattgatg gaacccctgt acgggatgaa cggagtggga cacccaccca ggatgagatg 1440 atggacaage ceacatecag cagtgtagat actatgteee tgettietaa gateattage 1500 cetggtteet caacacccag cagtacaaga teaccaccc etgggagaga tgaaagetae 1560 ccccgagage tetecaatte tgtatetaca tategaceet ttggtetggg cagtgaatet 1620 ccctataagc agccttctga tggaatggag agaccatctt ccctgatgga ctcttcacag 1680 gaaaagttct acccagatac ttcttttcaa gaagatgagg attaccgaga ttttgagtat 1740

```
tragggette caccetetge catgatgaac ctacagaaga aaccagecaa atetateetg
                                                                     1800
aaatcaaqca aqctqtctqa taccaccqag taccaqccaa ttctqtccag ttataqccac
                                                                     1860
agageceaag aatttggggt aaagtetgee tteeeteeat etgtaaggge eeteetggae
                                                                     1920
totagtgaga actgtgaccg tototoatot tococtgggc tatttggtgc ottoagcgta
                                                                     1980
agagggaatg aacctgggtc tgaccggtca ccatcaccga gtaagaatga ttcatttttc
                                                                     2040
acccetgaet ccaaccacaa tagettgtet caatetacca etgggeatet cagtttgeca
                                                                     2100
cagaagcagt acccagacte tecteaceca gteceacate gttecetttt eteteegcag
                                                                     2160
aacaccettg cegeteceae gggteaecea cecaegteag gegtggagaa agteetggee
                                                                     2220
tccaccattt ccaccacgtc gacgattgaa tttaagaata tgcttaaaaa cgcctcacgt
                                                                     2280
aagccctcag atgataagca ttttggccag gctcccagca agggcactcc aagtgatggt
                                                                     2340
gtcagtetet caaaceteae ecaacecage ttgacegeca etgatcagea geaacaagaa
                                                                     2400
gagcactace geatagaaac eegegtetee teeteetget tagaettgee tgatageaca
                                                                     2460
gaagaaaagg gggcccctat agaaaccttg ggttatcaca gtgcatccaa taggaggatg
                                                                     2520
tcaggggagc cgatccagac cgtagagtcc atccgagttc ctgggaaggg aaatagagga
                                                                     2580
catgggcgtg aggcttcaag ggtgggttgg tttgatctga gcacatcagg tagctctttt
                                                                     2640
gacaatggcc cttcaagtgc ctctgagttg gcatcccttg ggggtggggg cagcggaggc
                                                                     2700
ctcactggct ttaaaacagc accatacaag gaacgggcac ctcaatttca ggagagtgtc
                                                                     2760
ggcagctttc gttccaacag tttcaactca acatttgagc atcatcttcc cccatcccc
                                                                     2820
ttggaacatg ggacaccctt ccagagagag ccagtggggc catcatctgc cccacctgtc
                                                                     2880
cctcctaagg atcatggtgg tatcttctct cgagatgcac ccactcatct accetctgtg
                                                                     2940
gatetttega acceetteae aaaggaggea geeetggeee atgetgeeee acceeteet
                                                                     3000
cctggagage acagtggaat teettteect accecacete eteeteece teetqqqgaa
                                                                     3060
catagoagoa gtggtgggag tggtgtcccc ttttctactc caccccctcc tccacccct
                                                                     3120
gttgaccact ctggagttgt accettecca gececaceae tggeagagea eggagtggea
                                                                     3180
ggggctgtgg cagtatttcc caaggaccat agttccctcc ttcaagggac cctggctgag
                                                                     3240
cattttgggg tactcccagg acccagggac cacgggggcc ccacccaacg ggacctcaac
                                                                     3300
ggccctggcc tragccgtgt acgagagagc ctcaccctac cctcccattc tctggaacac
                                                                     3360
ctgggcccac cccatggagg aggaggtggg ggaggcagca acagcagcag tggcccccc
                                                                     3420
ttgggtccct cacacagaga caccatcage eggagtggta taatettaeg gagtceeegg
                                                                     3480
ccagactttc ggcctaggga accttttctc agcagagacc catttcacag tttaaagaga
                                                                     3540
cccaggccac cttttgctag gggccctccg ttctttgcac caaaacgccc attcttccct
                                                                     3600
cccaggtact gatggaaacc aagggaaagg cattttgaac agtctagaga acattggaag
                                                                     3660
taggagttig gittatigtt gitgittita titgittict cittcicgat tittittita
                                                                     3720
                                                                     3780
ttataacaaa gggcctctct tccaaagtaa gaaatcacat acgcttacgt tttactattc
aattcaatcc tccctcccat tgcacttatc taccttcccc aagitgtttg tattaaaaaa
                                                                     3840
aaaa
                                                                     3844
```

```
<210> 5642
<211> 390
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (312)...(2)
<223> similar to gi4379237 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5642
tcatcaatac agtgaaacag cgtaatattc tatagaccat ccaggtgatg aaggcccatt

```
aggcctacat tgtgacagag aagagaggt taacatcagt ctgggccaga cagtgaactt 120 ataatgttat ctcttccaag tgaatgcaaa ccgtgtctga gcctcctctc tgatggggat 180 tggaaagaat gccttctcc caggccagtg accacataca agttccagag gccctgctgt 240 cctgttgtac taaggatacc acgtctagca cagcacctgg actatgggt accacttgg taagtttatg taacccacta ccattcacca taatccatct ggcttctact ggggccatat tggtgaatta aagtctctga aagtagaact 390
```

```
<210> 5643
<211> 2152
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2153)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1405)...(912)
<223> similar to gi3874447 in the genepept database release 114
Run with FASTXY 3.3t00, default parameters
```

<400> 5643 ttttttttt ttgcagcagc agtttcacat ttattgaggg cctgccccag aggagctcac 60 agcctggggg ctgaggaccc cgaattgtgc agggggcggg gaagaaaaga ggtgaaggca 120 aaaaggcagg caatgcagag acaccgtggc ccaagcagag ggggtgcaag gcaggcacag 180 agcagggggc ctgatggcgg attggggagg tggagaaccg gtcagccctg cctagacctt 240 gggactggtg acacceacaa ctttgaaggg ctgccctccc ccaccaggaa tggcacttgc 300 ccggggcacc cttgtgggga gggcccagct cctccacctg ccctgagccg ggtccagctt 360 tcacaaaggc ccctccaccc aggacttccc aaccatgcag actcccggtg gagggcagga 420 agetggggte tggggeeeag eegggaegtg gaggtgggge etatgaggga geagatgaag 480 ttgttggtgg ccctgggacc ctgggcaagt ccctaaggaa cttccaggat cccatagaag 540 eccetgagee agetaagaag ggaaggaage agaacecaae gaagcaggae ggegetecaa 600 cgaggcctgg cccctcaaac ctgctcctgt cggggaagct caggagcaga taggcgaaaa 660 gcagggggac ccacctgggg ggagggggca gcagacagag cagccaggcg ggcagcagag 720 cagggacacg cacacacggc tcaccaccag cacccccttt aataaaacat ggggggggg 780 tcatgtgaca ggaagaaggg ggtgaaatag gaccatttta caaccacaga aaaacctctg 840 taacaatgtc ctaacgccct ggcaagaagg gggcaaccag ggcaaccaag cgggctggaa 900 cccagcccta ttttgtagag gatatcgtag tgtcccaggc cggtagagaa ggtagacctt 960 tgggctcgga agccctcagg gaaagatgtg cggattggtg gttgccgccc tcgnccgcgg 1020 teccatgtae teccaecetg gatggaeaeg etgaaggeee tgggeeageg caatgatgtg 1080 gatgtggtcg ctctccttgc acatgggctc caccttcctg cttggcagaa ctccttgaca 1140 gtccgtccac cctcgatgaa gtgctcgaag aacttgctct cgcgctgcag gtagcccgag 1200 gtgagcagcc gcaggtagac cacaaggtag tcggaggtgc tctggtcatt gaaggaggcc 1260 agcaggtcgg cgacagaggt ctgcttctcc acctgctcaa tcaggtccat gaacgtgttg 1320 tggaaatcct caattgtgaa ttcagtgaag ccctgggaca ccaggtcttc cttgctcttg 1380 gcagacacag cettgaacet gggggtggga tggaaaggeg ggeecageat gggeteeteg 1440 accageceag aegecaggge egagaeagea etgeceegee tggeaaggee agagteeage 1500 ccatcgcccg ggaaggaggg agacacccta ctcgagacac atcctactcg cccggggagg 1560

```
aggtagacac ccacctgcct cggtgcccag tgcccaccct tctcaccgct gcaactcctt
                                                                     1620
gctgtcatcc agcagtgcct ccaagtggga gaatccgaaa gcccgataga aacagttgcc
                                                                     1680
gtcaggcctg gtcttgcgga tgtacgagta ctttttgtgg aggtccttga tcttctgttg
                                                                     1740
atagatgttg tcatcttcag catactcctt gtataggacc gagagctcca gccgctctga
                                                                     1800
caccagaggg ttctgcacag caatctcttg ctgaattcgg tcctgctgag ccatgatggc
                                                                     1860
ttcatcatag gccagacagt taacaccaga aaaagtcgca ggcctcaggg acagatcccg
                                                                     1920
caggeeeete acateeeagg geegeetaeg acateeegaa tggeeegeee ggaeetttgt
                                                                     1980
gctccgtagc ccagcgaaac tcgaggccct cacggcgcgg gccgccgctg gagcaggccg
                                                                     2040
gggggctcgg ccctggcgta ggcctctctg cctgactgca aggacagggg cgagagggct
                                                                     2100
cggggcccct ggagccagga gccgaggggt tgggcagagg gcggagacga aa
                                                                     2152
```

```
<210> 5644
<211> 2044
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2045)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1888) ... (617)
<223> similar to gill50421 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5644
ttttttttt ttaaactttt ataaccttaa agggttattt taaaataatc tatggactac
                                                                       60
cattttgccc tcattagctt cagcatggtg tgacttctct aataatatgc ttagattaag
                                                                      120
caaggaaaag atgcaaaacc actteggggt taatcagtga aatatttttc ccttegttgc
                                                                      180
ataccagata cccccggtgt tgcacgacta tttttattct gctaatttat ggacaagtgt
                                                                      240
taaacaggaa caaggaatta ttocaacaag ttatggcaac atgttgctta ttttcaaagt
                                                                      300
acagtttaat gtctaggtgc cagcetttga tatagetatt tttgtaagaa cateeteetg
                                                                      360
gactttgggt tagttaaatc taaacttatt taaggattaa gtaggataac gtgcattgat
                                                                      420
tttgctaaaa gaatcaaggt aataattact taagctgatt cctgagggtg ggtatgactt
                                                                      480
ccaagctgga actccatcct tgatcgggta gggattttt aaatcccatt tttggtaaaa
                                                                      540
ctatttccca aggaaatttt aaggcccttt cacttcagga aagaaaaaag gttgttgggg
                                                                      600
ggctgaggca ctttaatttt cttgagcagg gaagggagtt tcttcccaaa cttcacccat
                                                                      660
ctggggatac tgggtgtttc ttttacagga ttcctccttt aatttctgtt gagtagccgg
                                                                      720
gateettggg aggeatgtag gaageeeget ggateateae gggataettg aaatgeteat
                                                                      780
gcaggtggtc aacatactca cacaccctat tttcaaggct tgcagaaact gatatgtagt
                                                                      840
caaatataat caggtgctgc accagttcac agággccaac tccaccagca tgggggcaaa
                                                                      900
caggaatttc aaactttttg gccatcagca atactgagag gttctcattg acactgccca
                                                                      960
gtotgoaact gtoaatotgg aggaactgoa gggoottogo otgtaggagt tgottaaata
                                                                     1020
tractional giggeaactg tictrocotgg tgraaatgcc caattoocta aatgggacca
                                                                     1080
gtgccttgga aaatggtggc gtgccccaaa aatgtcaatc aaggggaggt tggctcctca
                                                                     1140
atccacaatg gettgaaett ggeeagettg gacatecaet ecacegeete aggeacatee
                                                                     1200
cagcgctggt tggcatccat catcaaagtc ttttccggtc caatcatgtc tcggatgatt
                                                                     1260
tggcatcttc gcatgtcatc ctggagatca gcacccacct ttactttaaa cctggtccag
                                                                     1320
```

```
ccatcettca gegectgggc acagagetge tteaacgtgt catctgagta ccccagecag
                                                                     1380
gegeaegatg tegtgtaage agggtateet tgtgeeagea tttgettete tetttettt
                                                                     1440
ttaccaattt gacctttctg cagtatttct agggcatcct cctcagtcag gacatcagtg
                                                                     1500
atgtacctga aatctatgca ggataccagc atcctgggat ccatgtccac aagtaacttc
                                                                     1560
                                                                     1620
dagadagget treedectg ettggedead aagteddada degegttag gadggedget
gtegeeaggt geaceaegee ettttetgga ceaateeate tgagetgeee ateaettgtg
                                                                     1680
agetgeetat agaageetet gaagteacea acaatgteet tgaggteett gttgageaca
                                                                     1740
tggtgggcga gggcattcac agcacagaca acaacttcag tgccttttcc cagagtgaag
                                                                     1800
gtaattccac acceptigat tecatettet geatcagttt ctatgacgac ataggcagec
                                                                     1860
gagtagtcag ggtccgtgtg catggcgtcc gcgccgtggc ccccaagcga cgtggggaag
                                                                     1920
cgcacgtccc ggaccgagag ccgggagatc ctgccgcgca ccatggcccc tgcgccccgt
                                                                     1980
ggccgcggcc cccgtgcggt caggactggt ggaattacnc cgcactggac tagtgttcat
                                                                     2040
cgag .
                                                                     2044
```

```
<210> 5645
<211> 5154
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (296)...(5089)
<223> similar to gi5817151 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5645
gtgtcatggc gctctccatc taaagtctgt gcagcttccg gagagtggcg ggttgatttt
                                                                       60
etcactttgg actggttttt acttcccgac ttctggactc atctttcaag aggactttag
                                                                      120
actaattgca gataattaag agaatatgcc ttctgcatcc tgtgatacac tactggatga
                                                                      180
catcgaagat atcgtgtctc aggaagcaca gacaaggttg tgtttgacag agaaaggggc
                                                                      240
tttcttggtg agataaaata gtctcttcct gtatttctct cctttctcct tttttagttg
                                                                      300
ctctgggaaa ggaattetet etggteatge agatggtace ategttaggt atttetttga
                                                                      360
tgatgaagge tetggagagt cacaggagaa gttggttaac caccegtgte caccetatge
                                                                      420
cttggcatgg gcaaccaata gcatcgtggc tgcaggctgt gatcggaaaa ttgtagccta
                                                                      480
tggaaaagaa ggtcacatgc tacaaacttt tgattatagc cgtgaccctc aggagcggga
                                                                      540
gttcaccaca gctgtatcaa gtcctggggg ccagtctgtt gtgctaggaa gttatgacag
                                                                      600
gcttcgggtg ttcaactgga tccctcgaag aagcatctgg gaagaggcaa agcccaagga
                                                                      660
gattaccaat ttatacacca teactgeett ggeetggaag egggatgget caeggetetg
                                                                      720
tgtgggcaca ctatgtggtg gggtggaaca gtttgactgc tgcctccgaa ggagtattta
                                                                      780
caagaacaag tttgagttga cgtatgtggg acctagccag gtgattgtga agaacctgtc
                                                                      840
atcaggaacc cgagtggtgc tcaagtcaca ctatggctat gaggtggaag aggtgaaaat
                                                                      900
cctaggaaag gaacgttact tggtggctca cacatcagaa acactgctgc tgggggacct
                                                                      960
gaacactaat cggcttagtg agatagcctg gcaaggatct ggtggcaatg agaagtattt
                                                                     1020
ctttgaaaat gagaatgtat gcatgatctt caatgccgga gagctaaccc tggtggaata
                                                                     1080
tgggaataat gacaccctgg gttctgtacg cactgaattc atgaaccccc acctcatcag
                                                                     1140
tgttcgtatt aatgagaggt gtcagcgagg aacagaagat aataagaaat tggcttatct
                                                                     1200
tattgatatt aagactattg ctatagtgga tctgattggt ggctacaaca ttggcaccgt
                                                                     1260
cagccatgag agccgtgtgg attggctgga acttaatgag actggacaca agctcctctt
                                                                     1320
cagggaccgg aaacttcgtt tgcatctgta tgatattgaa agctgctcta agacaatgat
                                                                     1380
cctcaacttc tgctcctata tgcagtgggt cccaggaagt gacgtgctgg tagctcagaa
                                                                     1440
```

```
ccgaaacagt ctgtgtgtat ggtacaacat tgaggcacct gagagagtca ccatgttcac
                                                                     1500
                                                                     1560
tattaggggt gatgttatag gtctggagcg gggcggggga aagaccgagg tgatggtgat
                                                                     1620
ggaaggtgtg actactgttg cctacacatt ggatgagggc ctcatcgagt ttggaacagc
                                                                     1680
cattgatgat ggcaactaca tccgggcaac agccttctta gagactctgg aaatgacccc
                                                                     1740
aqaaacagag gcaatgtgga aaaccttgag taaactggca ctagaggcaa ggcaactaca
                                                                     1800
cattgcggag aggtgctttt ctgctttggg ccaagtagca aaagctcgat tcctgcatga
gaccaatgag attgcagatc aagtatcccg ggaatatggc ggagaaggaa cagactttta
                                                                     1860
tcaggtccga gcacgtctag ccatgctgga aaagaactac aaactggctg aaatgatctt
                                                                     1920
tttggaacag aatgctgtgg aggaggccat gggcatgtac caggagctac accgttggga
                                                                     1980
                                                                     2040
tgagtgtatc gctgtggctg aagccaaggg gcacccagcc ctggagaagc tacgtcgtag
ttactaccag tggctgatgg acacacagca agaggagcga gcaggtgaac tacaggagag
                                                                     2100
ccaaggggat gggctagcag ccatcagcct ctacctcaaa gctgggctcc ctgccaaagc
                                                                     2160
tgctcggctg gtgctgaccc gagaggaact gctagccaac acagagctgg tagaacacat
                                                                     2220
cactgcagcc cttatcaagg gggaactcta cgaaagggca ggtgatctct ttgagaagat
                                                                     2280
tcacaatcca cagaaggeee tggagtgeta eegtaaagge aacgeattca tgaaageggt
                                                                     2340
agagetgget egattggeet teecagtgga ggtggtgaaa etagaggagg catgggggga
                                                                     2400
ccacctggtg cagcagaagc agcttgatgc agccattaat cactacatcg aagccaggtg
                                                                     2460
ctccattaag gcaattgagg ccgccctggg tgcccgccag tggaagaagg caatttatat
                                                                     2520
attagateta caggacegga acaetgcate caaatactat cetetegtgg eccaacaeta
                                                                     2580
tgcatccctg caggagtatg agattgctga ggagctctat actaagggag atcggacaaa
                                                                     2640
agatgocata gacatgtaca occaggotgg togttgggaa caagoocaca agotggogat
                                                                     2700
gaaatgcatg agaccagaag atgtgtcagt gctatacatc actcaggccc aggaaatgga
                                                                     2760
gaagcagggc aagtaccgtg aggctgaaag gctatatgtg acagtacaag agcctgatct
                                                                     2820
tgccatcacc atgtacaaaa agcacaagtt gtatgatgac atgatccgcc tggtagggaa
                                                                     2880
gcaccatcca gatetectca gtgatacaca cetacatetg ggcaaggage tggaggetga
                                                                     2940
aggccgacta caggaggctg agtaccacta cctcgaggcc caggaatgga aggcaacagt
                                                                     3000
gaacatgtac cgggccagtg ggctttggga agaggcctac agggtggcca gaactcaagg
                                                                     3060
aggggetaat geccacaaac aegtggeeta tetgtgggea aagageetgg gaggagagge
                                                                     3120
tgcagttaga ctgcttaata agctgggact cctggaagct gctgttgacc acgctgcaga
                                                                     3180
caattgetee titgaattig egittgaact eteteggetg geeeteaage acaaaaceee
                                                                     3240
cgaggttcat ctcaaatatg ctatgttcct ggaggatgag ggtaaattcg aagaggctga
                                                                     3300
ggctgaattc atcagagctg gtaaacccaa ggaggcagtc ctcatgtttg tccataacca
                                                                     3360
ggattgggag gcagctcagc gtgtggctga ggctcacgac cctgacagtg tcgccgaggt
                                                                     3420
gcttgtggga caggcccggg gggccttgga ggagaaggac tttcagaaag cagaagggct
                                                                     3480
gctgctccgg gcccagagac caggcctggc cctcaattat tataaggagg ctggattatg
                                                                     3540
gagtgacgct ctgcgcatct gcaaggacta tgtgcccagc cagctggagg ctctgcagga
                                                                     3600
agaatatgag cgggaagcta ctaagaaggg ggccaggggt gtggagggat ttgtggaaca
                                                                     3660,
agctcgacac tgggagcagg ctggagagta cagccgtgcc gtggactgct acctcaaagt
                                                                     3720
gcgagactct ggaaacagcg gcctggcgga gaagtgctgg atgaaggcag ctgaactctc
                                                                     3780
catcaagttt ctgcctcccc aacgtaatat ggaagtcgtt ctggctgtag gaccccagct
                                                                     3840
gattggaatt ggaaagcaca gtgcagctgc agagctctat ctgaatctgg accttgtcaa
                                                                     3900
ggaagcaatc gatgctttca tcgagggtga ggagtggaac aaggcgaagc gtgtagctaa
                                                                     3960
ggagttagat cccaggtatg aagactatgt ggagcagcat tataaagagt tcctcaagaa
                                                                     4020
tcagggcaaa gtggactcgc tggtgggtgt ggatgtgata gctgctttgg ccctgtatgt
                                                                     4080
ggagcagggc cagtggggac aagtgcattt gaaacagcta ccaagcagaa ctacaagatt
                                                                     4140 -
ctgcacaagt atgtggcttt gtatgcaact cacttgatcc gggagggtag ctctgcccag
                                                                     4200
gcattggccc tgtatgtaca gcacggagcc cctgctaacc čacagaactt caatatctac
                                                                     4260
aaaaggatet teaetgaeat ggtgagetet eetggaaeea aetgtgeega ggeetateat
                                                                     4320
ağctgggctg atcttcgaga tgtcctcttc aacctggctg tgctgtctcc ctcctctagt
                                                                     4380
gtgaaaacct ggtgaagtcc agtgaggcaa actctccagc ccatgaggag ttcaagacga
                                                                     4440
tgctgctgat cgctcattac tatgccacgc gctctgcagc ccagagtgtc aaacagctgg
                                                                     4500
aaaccgtggc tgccaggett tetgttteae tettgegtea caeccageta etacetgtag
                                                                     4560
acaaageett etatgaagea ggeattgetg eeaaggeagt tggetgggat aacatggeat
                                                                    4620
tcatcttcct caatcgcttt ttggacctga ccgatgcaat cgaggaaggg actctagatg
                                                                     4680
geettgacca etetgatttt caggatacag acatteeett tgaggtgeea eteccageta
                                                                     4740
agcagcatgt accggagget gagagagaag aggttcgaga ctgggtgctt acagtctcca
                                                                     4800
tggaccagcg gctggagcag gttctgcctc gggatgacgc gtggcgccta cgaggcctcc
                                                                     4860
```

```
<210> 5646
<211> 1690
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1691)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1654)...(764)
<223> similar to gi563377 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5646 60 aacccggccc cggaatttat ttttgggggc ccaaaaaaaa aaaatttact ttcccacccc 120 cgggcgttaa aattggttcc tttaaaaggg ccccccttt ttttttttt gtgggtgtta 180 gacatcaact ctacatttat tgcagtcctt taagtctatg acggegggc agecgctgac 240 agcatgcaga gcaagttagg aaaaaccgag gccctgtggg aacagcaacg cgggctccag 300 ccaggetete gteetegeag ceteccaéga gacetgggge teagggeage egettéecea 360 eccageacag cageagaggg geectagage ecceacagaa aggaetgtee cageeteggg 420 agcaagagat ggctccctcc ggacgggcct catccaactc cgccctggag tgtggctgga 480 aggaagggac agagaaagaa gggacagagg aaaggggctg tcccagccca agaaggcagt 540 tecaetggga agteagteag gteeggegge agegetteet etggeaggge egaggetege 600 gactgetggg gtgggeggag gtegetgeet ggggategga eaetggagee ttgeggegge 660 tgcaactcat gctcaggacc cagcccagct tgttgtgtag cacctgcttg aggcccggcg 720 gcagoggoag accotocago gtgtotocog agtotggoog cagotggogo aggoggtggo 780 agcacaggta ctggagggaa gtggcgctgg cacaggagcg ggtgaccttc atgctgctcc 840 gggccgccgt ggagcacacc atcgggtaga atctcttgtt ctgcagcttg gtggctgcca 900 cacctggaag ggaggggccc agcctataca cttcctgttc ttgaaaaagg tgagtgtgcc 960 gtgccaggtg tecaggtgca egecaatgat ggageeetgg eegaacegeg aegagaaget 1020 ggtcttgtcg cccttgtggt ggaggaggcc cgtgtaggag aggccccagc tgtcctcatc 1080 cctgcccagc aggctgcaga acgtgtggcg gtatttgtcc aggtccacat ccgacgtccc 1140 gatgcccacc atcatgtcgg tgccgtagac gggagaggtc atcttgatct cccagaagtg 1200 ctggccctcc cccagctcct tggtgccccg gatggccgct gtgccgcagc tgtactccat 1260 gtggaagetg acettacggt tgtcacaget cagcagggtg getgatgact tatttaagtc 1320 atcccagacc cagtogaaat actogtotto ototoogcag oggoagtoco tgccccggtg 1380 ggccgagtgc aggctgctac agaaggaggc ctcgctctgc ccagcacagt cacagaagga 1440 ctcgccggtc acgggcaccg cactggggat ggatggcggc agcgtggagt actcggggtc 1500 ggagtccgag tcgctgtgct gcccatcaga gtcgtagccc cagttagtgg agcctgctag 1560 agccacggcc cgggcatctg cgtctcggcg ggctgcactc aggacgaagt gccaggccct 1620

```
<210> 5647
<211> 2203
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (769)...(1907)
<223> similar to gi5912057 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5647 gacccacgcg ttcgcccacg cgtccgccca cgcttatgct ctattatatt aactctttct 60 tacctttttt tetgääette täggeettet ettteeagaa etggtggaag acaaatgaaa 120 cggccaagat ggtaagaaac aagccgcatt tctccttggg gagactgata atttaaaagg 180 tttgttgtgt caaaaacatt cccagcttca tcaccaaccc tttccttcca cctctgccca 240 ctggagacca cttatatccc gaagcggacg cggcagctga agtcaggaaa ccatgcatca 300 cattagcagg agccaactgc agactttaaa ctccgttcaa catgtggatg cggcagagaa 360 atgacetgte cagacaagee ggggeagete ataaactggt teatetgete eetgtgegte 420 ccgcgggtgc gtaagctctg gagcagccgg cgtccaagga cccggagaaa ccttctgctg 480 ggcactgcgt gtgccatcta cttgggcttc ctggtgagcc aggtggggag gqcctctctc 540 cagcatggac aggcggctga gaaggggcca catcgcagcc gcgacaccgc cgagccatcc 600 ttccctgaga tacccctgga tggtaccctg gcccctccag agtcccaggg caatgggtcc 660 actotgoago coaatgtggt gtacattaco ctacgotoca agogoagoaa googgocaat 720 atcogtggca cogtgaagec caagegeagg aaaaageatg cagtggcate ggetgeecea 780 gggcaggagg ctttggtcgg accatccctt cagccgcagg aagcggcaag ggaagctgat 840 getgtageae etgggtaege teagggagea aacetggtta agattggaga gegaeeetgg 900 aggttggtgc ggggtccggg agtgcgagcc gggggcccag acttcctgca gcccagctcc 960 agggagagca acattaggat ctacagcgag agcgccccct cctggctgag caaagatgac 1020 atccgaagaa tgcgactctt ggcggacagc gcagtggcag ggctccggcc tgtgtcctct 1080 aggageggag ecegtttget ggtgetggag gggggegeae etggegetgt geteegetgt 1140 ggccctagcc cctgtgggct tctcaagcag cccttggaca tgagtgaggt gtttgccttc 1200 cacctagada ggatectggg geteaacagg accetgeegt etgtgageag gaaageagag 1260 ttcatccaag atggccgccc atgccccatc attctttggg atgcatcttt atcttcagca 1320 agtaatgaca eccattette tgttaagete acetggggaa ettateagea gttgetgaaa 1380 cagaaatgct ggcagaatgg ccgagtaccc aagcctgaat caggttgtac tgaaatacat 1440 catcatgagt ggtccaagat ggcactcttt gattttttgt tacagattta taatcqctta 1500 gatacaaatt gctgtggatt cagacctcgc aaggaagatg cctgtgtaca gaatggattg 1560 aggccaaaat gtgatgacca aggttctgcg gctctagcac acattatcca gcgaaagcat 1620 gacccaaggc atttggtttt tatagacaac aagggtttct ttgacaggag tgaagataac 1680 ttaaacttca aattgttaga aggcatcaaa gagtttccag cttctgcagt ttatgttttg 1740 aagagccagc acttacggca gaaacttctt cagtctctgt ttcttgataa agggtattgg 1800 gaaagtcaag gaggtagaca aggaattgaa aagcttatcg atgtaataga acacagagcc 1860 aaaattetta teacetatat eaatgeacae ggggteaaag tattacetat gaatgaatga 1920 caaaagaatc ttctggctag ggtgttagat atatttatgc atttttggtt ttgttttaa 1980 atcaagcaca tcaacctcaa gcccgtttag caatgaggca gtgtagatga atacgtaaaa 2040 taaatgactt taaccaagta gctataatgg gacttagcac tgtatgcata cttaaaaagg 2100

ttttgaaaaa caaactactt gagaaatatt tgtttatatt tttctctaac atcatgctat 2160 gtgtcagtct gaacatctga caacagaaat ttcagttatt att 2203

```
<210> 5648
<211> 1100
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (977)...(59)
<223> similar to gi5524927 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5648 ttttttttt ttggggcagc gggggtcttt attcgtcaga ttttccttct tgggctaatt 60 cccaagtttt ggcaagggaa agtcaataaa gtgttggtaa ttgcaaaggt ccagaatggc 120 aagcagaccc agtggggcca gcagcccttc cctggatagg gctccagggt ccttcactgg 180 aggaagatee ttggtaeeee tgetetetee aaggetggga etagtgttee tggttgtgge 240 caggtgtgca gtggttgtga cagcagatgg tcttggcttg gtcctagcag aggctgtgac 300 cccatacatg ggcctgatgg tgccgaaagg cctggcgtga gcatccaccc accgcagcag 360 ggcctgtggt ctccactgac agatgctgag cagggccagg acatcaccct cagccgtgtg 420 cgagtctgga ggggactgcc catacaggcg agtgtagatg ctgcctaggc tgtagctctt 480 cettgggeeg tgttetgagg ggetgettge tegetceagg geetteageg eagtgatget 540 atccacacag aaggcaccat ccagagcact ggtgaggccc agcatagcca gctctgcttg 600 gagcaggggg aagtcgtagc ggtcaccatt gtgtgccacc aggcaccagg gctgtggctg 660 gcgccgcagg aaggctagga gcaggttggc caggttgtca tcaaaacatt gacgcccatg 720 egetgeeage acagetgtge teagacetgt gatetegetg getgeaggge tgeaggeett 780 ecceggagee acacacaggg agagettgte taccacaege ggtggtggag gaactgtggg 840 aggtggcccc tgagaggtgg gggggctctc cagggcacat ctgtggacag ccagcaggca 900 cageteegtg acettggget gggagaaggg caagecagtg geeteeatgt egaaaaagat 960 gagggtetge atgggeeceg ggggeaggge etgegageee atggttgggt aegtacetge 1020 tgctgagccg tagcaggcag gcaggcaggc agtagtgact cggctgcacg ctctcccgcg 1080 gctctcgccg gacgcgtggg 1100

```
<210> 5649
<211> 1636
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (524)...(1397)
<223> similar to gi4091782 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5649
agggcctcgg ccatccaagg gtctcccagg tgaccttccc tccaccccag gaagctatga
                                                                       60
cagaggeegg gaagetgeec etacegetac ceccaegget ggaetggttt gtgcacacee
                                                                      120
agatgggcca gctggcccaa gacggggtcc ccgagtggtt ccatggtgca atctcaagag
                                                                      180
aggatgctga gaacttgctg gagtcacagc cactgggatc ctttctcatc agggtcagtc
                                                                      240
acagccatgt gggctacaca ctctcctaca agtaaggcct gggccgggat ccagggcagg
                                                                      300
ggcaggtggg ctcttgggtt tccttggagg gggcaagggg tgcttcatgt catagcttct
                                                                      360
cagaaagcag cagtaactga ggctgtggat ctgagaacgg gagctgctag ccaagcaatg
                                                                      420
agtgaagett ttgteegtag tggeatgttt tatetgagge cageetttgt acteetgtgt
                                                                      480
tataaatggg ggaaactgag gcacagcgag gttagtaacc tgctgggtgt tgcatggcca
                                                                      540
gtgagtgaag aagcetgeat gggaacetgg ggtagtetgg etgtageagt gaegetgeeg
                                                                      600
gcccaagggc tggggacttg gggcagggat gagggggagt aggatgtccc agccccgca
                                                                      660
gtgtctccgc agagcccaaa gcagctgctg ccatttcatg gtgaagctct tggatgatgg
                                                                      720
gactttcatg atccccgggg agaaggtggc ccacacctcg ctggacgccc tggtcacctt
                                                                      780
ccaccagcag aagccaattg agccgcgcag ggagctgctg acacagccct gcaggcagaa
                                                                      840
ggatecegea aacgtggatt aegaggatet etteetetae tecaaegeag tggeegagga
                                                                      900
agetgeetge eeggtgtetg eeeetgagga ggeeteeeea aageeagtee tgtgteaeea
                                                                      960
atcaaaggaa aggaagccgt cagcagagat gaacagaata accaccaagg aagccacttc
                                                                     1020
ctcctgcccc ccaaaatccc ctcttggaga gacccgccag aaactctgga ggagcctcaa
                                                                     1080
aatgeteeee gagagaggee agagggteeg geageageta aaaageeaee tegeeaetgt
                                                                     1140
gaacttgtcg teactettgg atgteeggag atecaeggtg ateteaggee etgggaeegg
                                                                     1200
aaaaggcagc caagatcact caggggatcc cacctcgggg gacagaggct acacggatcc
                                                                     1260
ctgtgtggcc acatetetea aaageeeete acageeeeag geaccaaaag acagaaaggt
                                                                     1320
ecceaceagg aaggeegaga ggteggteag etgeattgag gtgaeeceag gggaeaggag
                                                                     1380
ttggcaccaa atggtagtga gagccctatc ctcccaggag tccaagccag agcaccaggg
                                                                     1440
cttggcagag cctgagaacg accagetece ggaggagtae caacaacege caecetttge
                                                                     1500
ccctgggtac tgctagagaa caggtccacc ctggctctgg gactcgctgc caggggctgc
                                                                     1560
cacactectg aatgeettaa catttettee atggeeceae accatggeat eegggggtet
                                                                     1620
tccgggaacc cgggaa
                                                                     1636
```

```
<210> 5650
<211> 5221
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5105)...(1520)

<223> similar to gi452755 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5650

tttttggcat ctaacaattg ttctttattt aaaaacactt tcaggaaaat ccaaggaaat 60
acagaagcaa ggcagcacca tagtcttccc agccaaggtg gaagtgcctc tggttcctcc 120
agcaattccc actggtgtta tcataactca acagtctgtt gcaatcagtt gtagaaaggc 180
acagagtgac agctggaatg caaagaaatg tgcacaaccc agagctctgt cagccttgcc 240
aaaactcaag tgcccccatg ggagggtctt gcaacatatg ttctgttgag caaagaggtt 300
```

```
gcaaaccaag cggttattgc aataaacacc acttgtgaca aacaaagttt gtaagtttaa
                                                                     360
atttatttt taaaaatgct tgtcttcctc actagacaat caactctatg agggcagaga
                                                                     420
ctatgtcacc actgtcccac cageccctgg cacacagtag gtactcaata aatatatgtt
                                                                     480
540
tgtgacccag ctgaagtgtg agtaggaaca ttctcttatt atgggtggag gaaagagaga
                                                                     600
ggagattgag aaaataagat aaaatacatt gatgcgcatc atttttggtg ttcgaaaagt
                                                                     660
aggattgaat taggactaat aaatctagag aattttacct ctttcaatgc ccaagccaca
                                                                     720
cttttctatc actttgaaac cgaaaaagta aatactttcc caacatttgc tttgctgggt
                                                                     780
aggaaatggc tttaataaaa atgccatctc taagttgcca tggcatcatt aaaagaaagg
                                                                     840
attgtcatgc ccagggtcca gaacttgaag ggtggcaggc accagcaagc accatagctc
                                                                     900
tgaatgggcc tgccttacag gtcctcactc caacactgct cacttcttcc agcttgaaaa
                                                                     960
tggagaacat gttcacaccc tgggttgtaa gtaggaagga actctgatca gcaagaagct
                                                                    1020
tgcagaggac aatatgaggc aatagtattt tactggccac agtgtgactg ggttqcactc
                                                                    1080
tgttctgaca ttaggaagaa tttcatgcct gggcaaagtc aaagtttttt cctttagtca
                                                                    1140
cattactcaa agaataagtt gactatatcc caacagcact tgtccaaatt ccaggactcc
                                                                    1200
acttacgact attatgaggc aaacatetge etgtgeagtt tgtettteea teeagtetat
                                                                    1260
tettiggggt ccagateett gateattete acacecagtg etatetgeet cattgeecag
                                                                    1320
catcaggaag caaggagtat ggtgcaataa gacaaccacc tggccatggg atcaggaatg
                                                                    1380
gggtcaggtc agttgacctg agcataccca ttaaacatgt tcaaatgtcc ccatccacc
                                                                    1440
cactcacatg acatggctcc cgagccctga gatctgtatc ccaagaacct cagttgagaa
                                                                    1500
atatttatgg cagetteact gttgeteaag ageetgggta ttgtageage etgggggeag
                                                                    1560
gttgtcccta atgttctcca agttcttcac atcagccaga atcccatcta tgcttgtctc
                                                                    1620
cagcaaatgg aggtggcccc tetgetgacg tgccetetet tecagetetg acatcatggg
                                                                    1680
ccgcagttgg ctgttgatct gggtcttggc tcgggaaagc ttctgctcca gtaagaccag
                                                                    1740
cccctcttca tctacactga gaggctggtc catcagatgc aggaggccgt ctaatgtgtt
                                                                    1800
gagtgtgtct tggattgtaa ccccagcgtt cttggctctg gtatcaacct tctgggcttc
                                                                    1860
tgtaatcacc atctgtactg catccatatt cgtgtcaaac tccagctcct tcctttccag
                                                                    1920
cteteettee actteeetea teteaetett cagagaggee agteeettt ceatggeeaa
                                                                    1980
ggetecatet getgteacat tggettecaa gtteagaete ceaateteet gtteaatete
                                                                    2040
actggagatt tecagggeet ecceggeec attetttgee etetgtgeat cageageage
                                                                    2100
gctccccagg gctctttctg cttgctgggt cttgtcactg gcatctgaaa ccttctggct
                                                                    2160
gatgtaggag agtetettea tggettette agettetget tittetgttgt ceaectgeag
                                                                    2220
gtcaaactct ctgaggtttt taaggatgct ctcaacttca taaaaagtgg cattgccat
                                                                    2280
actcagtgct tettgtgctc tgettttage aagattggca egggaaagca getgatetga
                                                                    2340
tttctctctc ccactttttc cattctgtaa gagctgctgt gcttcttctt tccagtttcc
                                                                    2400
cagattette tgtgtaeget tgaacteate catatgeetg gttaecagge ttgagagtga
                                                                    2460
atcogetttt tgtttgatce tetttgette ttecacetga aaggactgat cactgactee
                                                                    2520
ctgaagccga gacactgaat ccaggaggcg gagactgtgc tgataagacc tatctgcttc
                                                                    2580
aattteeget tgagtggeet eeettgteaa etgetgggee agggaettgg tttteteeaa
                                                                    2640
tttttccaca agcccttgca ccacagcacc gtccgggcta ccgcttccgc ttccgactcc
                                                                    2700
ttcatgcagg gccttgcgca ccagtgagag ggcttgtttg gaatagtcct cagtttccct
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tgtcagttgc tccatgttac tggctgactc aacgtggctt tctgctaatc ttgtggcctc
                                                                    2820
ctgagccaga cttttaaagc catttggccc cacgtagtgg tctgaggcag gaatgttagt
                                                                    2880
gtttcccaag gaagettcae tttctgccag getcagetge atctgagtga tgageetgtg
                                                                    2940
agtatecega acteggttet ggtaetgaet teecagagee egaactettt ceacagteat
                                                                    3000
cttgaggtca tccaggcggc tctggtagct gttctcttgg ctcctcacct tggccaactg
                                                                    3060
gagaccaagg gatctgctag caccttctga aatctgggca tctctcagaa tgtcctgaag
                                                                    3120
ggcctgctca gcctgctgca tcctgccttc cagctctgta tcaqqtacta ctccatcacc
                                                                    3180
accetgagee tttgaaatea gggeeteeat tetetgaage tgetgeataa actgateeat
                                                                    3240
ctgaatcttc acttgattat agcaagctgg acagctgaat gctccatgct cacagttggg
                                                                    3300
gccaccaaat cetggettge aaacacaggt gccatcaett egacateett aacaggetet
                                                                    3360
gagececatg gggttacagt tgcaageteg aacaettgtt tgctgggttg ggagecaatg
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ggtccccgaa gtagcctgct tcgcactggt cgcagtaaat gccggctgtg ttgtggatac
                                                                    3480
acticaaaca cctgcctgtc agccggtcaa aattcccaga ggcactgggg tccacattgt
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tgttgcattg acagggctga caaggcctca ctgggccatg ttcaccaaag gggtccccaa
                                                                    3600
agtagecate ageacagage teacageggg caeeggtgae eeegggaggg cagttattge
                                                                    3660
acaccacctc ctccgtctcc ggcatcactg agcagctgaa cccgttatga cagggacatg
                                                                    3720
```

```
gcttgcagct gcgggggtcg tgcggatcgt tgtagaaacc aattgggcag tcagcacact
                                                                     3780
caatgtcagg attotcatcc cotgaataac aatotootgt gtotggatca caggcccotc
                                                                     3840
ccccttgaca gttacaagga atacaggtgc caaaaggccc cagtctcgct gaatctctct
                                                                     3900
tgtagccaga agcacaatcc tggcagaatt gccccttgta cccaacagga catatacact
                                                                     3960
                                                                     4020
gttcaacccc aggttgctgg gcttccagag acaggccggg ctgaaatcag ggtcacattg
                                                                     4080
tcaatgtacc cagtactgta ttctccatat gtagctcgga tgcggagggc tgtgagattc
cgcagtaacc ttcgatactc aaagtaactt caggctgggg gctccaatta ttgcttggat
                                                                     4140
geteatttaa eetgaatgtg taagtettgg tgageeeaca aggeagtgte ttgeeaagtg
                                                                     4200
gcatcaaggg agctgtgatc cgtagaccag caccttccag aatcacatca tgggcagatg
                                                                     4260
ggtgtctgcc tcctctgtcc acacggtagt caaaggacag gctttgacca tagctcacct
                                                                     4320
gttgattccc aagaaatttg gcaggagcca caaaatagac agggtctagt cgttgggctg
                                                                     4380
agctaaacac atcttgatgg cgctgtgacc attggagctt tgcaggagac ccatttcgtt
                                                                     4440
ggacagcett ccagccatca acatettgat gaaaggtaga ggtgatetta tggacaetgt
                                                                     4500
attetgeaga getgeggeag etggetgaat geceatagea gaaacaetgg gtacageeet
                                                                     4560
cagggttccc cccatccaga ttatagtaac ctgatcgaca cctatcacag cgttctccag
                                                                     4620
tgacagetgg ettgeagaea eageggeeeg egteaeaggg eeetgegatg eeagetgggt
                                                                     4680
cacagtcaca cttggagtct agcagtctct ggtcttgggt gcaccccgca tccgtgagca
                                                                     4740
tgtggaagee tggeagaeat eggtegeate tggeteetgt cacacetggt ttacagetge
                                                                     4800
accgtccgga gttgtcacat cgagcactaa gagaaccttt ggagttacaa ttgcagggca
                                                                     4860
aacageggte cetttetetg tgeeggtaaa agecattett geaetteteg cagtgaatge
                                                                     4920
catcagtgtt gtcattgcag ttgaggcagc ggaatccatt accagtttgt ctgtgaagtt
                                                                     4980
cccgatcaaa gatacactgc ctggacttcc cattgcaatc acagacttcc ctcctggagg
                                                                     5040
tggcccgggc tgcgggcagg aggagcgaga agcagaggca gcagcccagc cagagcgcag
                                                                     5100 '
geatggeggg geegggeege teagtetetg teteegetge aggggteget geeeggegee
                                                                     5160 .
teggttggtg gtteteacte tgegeteege tgtgeettee tttteetteg ateaggtggt
                                                                     5220
                                                                     5221
```

```
<210> 5651
<211> 5553
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52)...(5295)
<223> similar to gi2347136 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5651
ccacgcgtcc ggacagacag acggatctaa cctctcttgg atcctccagc catgaggctg
                                                                       60
ctctgggggc tgatctgggc atccagcttc ttcaccttat ctctgcagaa gcccaggttg
                                                                      120
etettgttet eteettetgt ggtteatetg ggggteeece tateggtggg ggtgeagete
                                                                      180
caggatgtgc cccgaggaca ggtagtgaaa ggatcagtgt tcctgagaaa cccatctcgt
                                                                      240
aataatgtcc cctgctcccc aaaggtggac ttcaccctta gctcagaaag agacttcgca
                                                                      300
etecteagte tecaggtgee ettgaaagat gegaagaget gtggeeteea teaacteete
                                                                      360
agaggeeetg aggteeaget ggtggeeeat tegeeatgae taaaggaete tetgteeaga
                                                                      420
acgacaaaca tecagggtat caacetgete tteteetete geegggggea cetetttttg
                                                                      480
cagacggacc agcccattta caaccctggc cagcgggttc ggtaccgggt ctttgctctg
                                                                      540
gatcagaaga tgcgcccgag, cactgacacc atcacagtca tggtggagaa ctctcacggc
                                                                      600
ctccgcgtgc ggaagaagga ggtgtacatg ccctcgtcca tcttccagga tgactttgtg
                                                                      660
```

```
atcccagaca totcagaged agggaectgg aagateteag cocgattete agatggeetg
                                                                      720
gaatccaaca gcagcaccca gtttgaggtg aagaaatatg tccttcccaa ctttgaggtg
                                                                      780
aagatcacco ctggaaagco ctacatcctg acggtgccag gccatcttga tgaaatgcag
                                                                      840
ttagacatec aggecaggta catetatggg aagecagtge agggggtgge atatgtgege
                                                                      900
                                                                      960
tttgggctcc tagatgagga tggtaagaag actttctttc gggggctgga gagtcaaacc
aagetggtga atggacagag ccacatttee etetcaaagg cagagtteca ggacgeeetg
                                                                     1020
                                                                     1080
gagaagetga atatgggeat taetgaeete eaggggetge geetetaegt tgetgeagee
atcattgagt ctccaggtgg ggagatggag gaggcagagc tcacatcctg gtattttgtg
                                                                     1140
                                                                     1200
teateteet teteettgga tettageaag accaagegae acettgtgee tggggeeee
                                                                     1260
tteetgetge aggeettggt cegtgagatg teaggeteee cagettetgg catteetgte
aaagtttetg ceaeggtgte tteteetggg tetgtteetg aagteeagga catteageaa
                                                                     1320
aacacagacg ggagcggcca agtcagcatt ccaataatta tccctcagac catctcagag
                                                                     1380
etgeagetet eagtatetge aggeteecea cateeagega tageeagget caetgtggea
                                                                     1440
                                                                     1500
gececaeett caggaggeee egggtttetg tetattgage ggeeggatte tegaeeteet
                                                                     1560
cgtgttgggg acactetgaa eetgaaettg egageegtgg geagtgggge cacettttet
cattactact acatgatect atccegaggg cagategtgt teatgaateg agageecaag
                                                                     1620
aggaccetga ceteggtete ggtgtttgtg gaccateace tggcaccete ettetacttt;
                                                                     1680
gtggccttct actaccatgg agaccaccca gtggccaact ccctgcgagt ggatgtccag
                                                                     1740
getggggeet gegagggeaa getggagete agegtggaeg gtgceaagea gtaceggaae
                                                                     1800
ggggagtccg tgaagctcca cttagaaacc gactccctag ccctggtggc gctgggagcc
                                                                     1860
ttggacacag ctctgtatgc tgcaggcagc aagtcccaca agcccctcaa catgggcaag
                                                                     1920
gtetttgaag etatgaadag etatgadete ggetgtggte etgggggtgg ggadagtgde
                                                                     1980
cttcaggtgt tccaggcage gggcetggce ttttctgatg gagaccagtg gacettatee
                                                                     2040
                                                                     2100
agaaagagac taagctgtcc caaggagaag acaaccegga aaaagagaaa egtgaacttc
                                                                     2160
caaaaggcga ttaatgagaa attgggtcag tatgcttccc cgacagccaa gcgctgctgc
                                                                     2220
caggatgggg tgacacgtct gcccatgatg cgttcctgcg agcagcgggc agcccgcgtg
cagcagetgg actgeeggga geeetteetg teetgetgee aatttgetga gagtetgege
                                                                     2280
aagaagagca gggacaaggg ccaggcgggc ctccaacgag ccctggagat cctgcaggag
                                                                     2340
gaggacetga ttgatgagga tgacatteee gtgegeäget tetteeeaga gaactggete
                                                                     2400
tggagagtgg aaacagtgga ccgctttcaa atattgacac tgtggctccc cgactctctg
                                                                     2460
accacqtqqq aqatccatqq cctqaqcctq tccaaaacca aaggcctatq tqtqqccacc
                                                                     2520
ccagtccage teegggtgtt cegegagtte cacetgeace teegcetgee catgtetgte
                                                                     2580
egeegetttg ageagetgga getgeggeet gteetetata aetaeetgga taaaaaeetg
                                                                     2640
                                                                    -2700
actgtgageg tecaegtgte eccagtggag gggetgtgee tggetggggg eggagggetg
geceageagg tgetggtgee tgegggetet geceggeetg ttgeettete tgtggtgeee
                                                                     2760
                                                                     2820
acggcageeg cegetgtgte tetgaaggtg gtggetegag ggteettega atteeetgtg
ggagatgegg tgtecaaggt tetgeagatt gagaaggaag gggeeateea tagagaggag
                                                                     2880
etggtetatg aacteaacce ettggaccae egaggeegga eettggaaat acetggeaac
                                                                     2940
tetgateeca atatgateee tgatggggae tttaacaget aegteagggt tacageetea
                                                                     3000
                                                                     3060
gatecattgg acaetttagg etetgagggg geettgteae eaggaggegt ggeeteeete
ttgaggette etegaggetg tggggageaa accatgatet acttggetee gacaetgget
                                                                     3120
getteeeget acetggacaa gacagageag tggageacae tgeeteeega gaceaaggae
                                                                     3180
cacgccgtgg atctgatcca gaaaggctac atgcggatcc agcagtttcg gaaggcggat
                                                                     3240
ggttoctatg eggéttégétt étoacégege agéagéaéet egétéacago etttégtette
                                                                     3300
aaggteetga gtitiggeeea ggageaggta ggaggetege etgagaaaet geaggagaea
                                                                     3360
tetaactgge ttetgteeca geageagget gaeggetegt teeaggaeet etetecagtg
                                                                     3420
atacatagga gcatgcaggg gggtttggtg ggcaatgatg agactgtggc actcacagcc
                                                                     3480
tttgtgacca tegecettea teatgggetg geegtettee aggatgaggg tgeagageea
                                                                     3540
                                                                     3600
ttgaagcaga gagtggaago otocatotoa aaggcaaact catttttggg ggagaaagca
                                                                     3660
agtgetggge teetgggtge ceaegeaget gecateaegg cetatgeeet gacaetgace
aaggeeeetg eggaeetgeg gggtgttgee cacaacaace teatggeaat ggeeeaggag
                                                                     3720
actggagata acctgtactg gggeteagte actggttete agageaatge egtgtegeee
                                                                     3780
accongete etegoaacco atongaceno atgenecago ecchagenet giggatigaa
                                                                     3840
accacageet aegeeetget geaeeteetg etteaegagg geaaageaga gatggeagae
                                                                     3900
caggetgegg cetggeteae eegteaggge agetteeaag ggggatteeg eagtaceeaa
                                                                     3960
gacacggtga ttgccctgga tgccctgtct gcctactgga ttgcctccca caccactgag
                                                                     4020
gagaggggtc tcaatgtgac tctcagctcc acaggccgga atgggttcaa gtcccacgcg
                                                                     4080
```

```
ctgcagctga acaaccgcca gattcgcggc ctggaggagg agctgcagtt ttccttgggc
                                                                     4140
agcaagatca atgtgaaggt gggaggaaac agcaaaggaa ccctgaaggt ccttcgtacc
                                                                     4200
tacaatgtcc tggacatgaa gaacacgacc tgccaggacc tacagataga agtgacagtc
                                                                     4260
                                                                     4320
aaaggccacg tcgagtacac gatggaagca aacgaggaga ctatgaggac tatgagtacg
                                                                     4380
atgagettee agecaaggat gacceagatg eccetetgea gecegtgaca eccetgeage
tgtttgaggg tcggaggaac cgccgcagga gggaggcgcc caaggtggtg gaggagcagg
                                                                     4440
agtecagggt geactaeace gtgtgeatet ggeggaaegg caaggtgggg ctgtetggea
                                                                     4500
tggccatcgc ggacgtcacc ctcctgagtg gattccacgc cctgcgtgct gacctggaga
                                                                     4560
agetgacete cetetetgac egttacgtga gteactttga gacegagggg ceceaegtee
                                                                     4620
tgctgtattt tgactcggtc cccacctccc gggagtgcgt gggctttgag gctgtgcagg
                                                                     4680
aagtgccggt ggggctggtg cagccggcca gcgcaaccct gtacgactac tacaaccccg
                                                                     4740
agegeagatg ttetgtgttt taeggggeac caagtaagag cagactettg gecacettgt
                                                                     4800
gttctgctga agtctgccag tgtgctgagg ggaagtgccc tcgccagcgt cgcgccctgg
                                                                     4860
ageggggtet geaggacgag gatggetaca ggatgaagtt tgeetgetae taccecegtg
                                                                     4920
tggagtacgg cttccaggtt aaggttctcc gagaagacag cagagctgct ttccgcctct
                                                                     4980
ttgagaccaa gatcacccaa gtcctgcact tcaccaagga tgtcaaggcc gctgctaatc
                                                                     5040
agatgegeaa etteetggtt egageeteet geegeetteg ettggaaeet gggaaagaat
                                                                     5100
atttgateat gggeatgggt etggatgggg ceaectatga eetegaggga caececeagt
                                                                     5160
acctgctgga ctcgaatagc tggatcgagg agatgccctc tgaacgcctg tgccggagca
                                                                     5220
cocgccageg ggcagcctgt gcccagctca acgacttect ccaggagtat ggcactcagg
                                                                     5280
ggtgccaggt gtgagggctg ccctcccacc tccgctggga ggaacctgaa cctgggaacc
                                                                     5340
atgaagetgg aageactget gtgteegett teatgaacae ageetgggae cagggeatat
                                                                     5400
taaaggettt tggcagcaaa gtgtcagtgt tggcagcgaa gtgtcagtgt gtgttgctag
                                                                     5460
ggctgagage agtgcccctg cccgatgcag ttctgggcag gccaggttga cataacctta
                                                                     5520
gactetetga geeetgatga eeettggget gtt
                                                                     5553
```

```
<210> 5652
<211> 1669
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1643)...(1413)
<223> similar to gi288145 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5652
gcgaccacag ggctgaggtc agggctagga ttccggtgtc tctacgtagg ttgcttgaat
                                                                       60
ggggggcacc ctggcatgga cgctgctgtt gccgctgctg ctgcgggagt cagacagcct
                                                                      120
agaaccgtcg tgcaccgtgt cctccgcgga tgtggactgg aacgcggagt tcagtgccac
                                                                      180
gtgcctgaat ttcagtggcc tcagcctgag cctgcctcac aaccagtctc tgcgggccag
                                                                      240
caacgtgatt ctccttgacc tgtctgggaa cggcctgcga gagcttccag tgaccttctt
                                                                      300
tgcccacctg cagaagettg aggtcctgaa cgtgctacgc aaccccttgt ctcgtgtgga
                                                                      360
tggggcgctg gccgcccgct gtgaccttga cctgcaggcc gactgcaact gtgccctgga
                                                                      420
gtcctggcac gacatccgcc gagacaactg ctctggccag aagcctctgc tctgctggga
                                                                      480
cacaaccage teccageaca acctetetge ettectggag gteagetgeg eccetggeet
                                                                      540
ggcctctgca actatcgggg cagtggtggt cagcgggtgc ctgcttcttg gacttgccat
                                                                      600
cgctggccct gtgctggcct ggagactctg gcgatgccga gtggccagaa gccgggagct
                                                                      660
gaacaaaccc tgggctgctc aggatgggcc caagcccggt ttaggcttgc agccacggta
                                                                      720 .
```

```
eggeageegg agegeeeea ageeeeaagt ggeegtgeea teetgeeeet eeacteeega
                                                                      780
ctatgagaac atgtttgtgg gccagccagc agccgagcac cagtgggatg aacaaggggc
                                                                      840
teaceettea gaggacaatg aettttacat caactacaag gacategace tggetteeca
                                                                      900
gcctgtctac tgtaacctgc agtcactggg ccaggcccca atggatgaag aggagtacgt
                                                                      960
gatccceggg cactgagcct aagatgtcct aacctccacc cagaacccct tcagtccctg
                                                                     1020
ctgggtgact cagggcgtcc taacgcctcc atggcctcag tttccccatc tgaagaatgg
                                                                     1080
gtacaggaaa ggattgtcct tgaggcccca ggaagctctg ccgcccctc cctgtccctc
                                                                     1140
atgccgctcc tcagctccct cagctcctag agggggaaga ggagagaccc ccaacaaggg
                                                                     1200
gacaggaggg teactgtgc aatectgtca teacetteet gtggatgtae aggeagtget
                                                                     1260
caataaatgc ttcgaggctg atgaggctgc tggctcaggg tgcgtgggtt cctcaaggtg
                                                                     1320
gggatttctg agttctaaga ccaagtctcc atctgagact cccaaattgc tccccacctc
                                                                     1380
ccatccctgt tttttttgt tggtgggggt tgtttgtttg tttttgaaac tgagtctcac
                                                                     1440
tetgteacce aggtgggagg geaaggttgg ggtttaagtt aattgaaace teggetteeg
                                                                     1500
gggttaaagg gattttccgg cctaaccctc cggagaagtg gggattacgg aacccgccac
                                                                     1560
catgccgggc taattttggt atttataaaa aaaagggggt ttcgccatgt gggccaggtt
                                                                     1620
ggtttcgaat tottgaccta aagcgatttg cccgcctggg cctcctgaa
                                                                     1669
```

```
<210> 5653
<211> 1833
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (71)...(1833)

<223> similar to gi443940 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5653
tttcgtgccg tccgccgcgg acaagaccct ggcctcaggc cggagcagcc ccatcatgcc
                                                                       60
gagggagcgc agggagcggg atgcgaagga gcgggacacc atgaaggagg acggcggcgc
                                                                      120
ggagtteteg getegeteea ggaagaggaa ggeaaacgtg accgtttttt tgcaggatee
                                                                      180
agatgaagaa atggccaaaa tcgacaggac ggcgagggac cagtgtggga gccagccttg
                                                                      240
ggacaataat gcagtctgtg cagacccctg ctccctgatc cccacacctg acaaagaaga
                                                                      300
tgatgaccgg gtttacccaa actcaacgtg caagcctcgg attattgcac catccagagg
                                                                      360
ctccccgctg cctgtactga gctgggcaaa tagagaggaa gtctggaaaa tcatgttaaa
                                                                      420
caaggaaaag acatacttaa gggatcagca ctttcttgag caacaccctc ttctgcagcc
                                                                      480
aaaaatgcga gcaattcttc tggattggtt aatggaggtg tgtgaagtct ataaacttca
                                                                      540
cagggagacc ttttacttgg cacaagattt ctttgaccgg tatatggcga cacaagaaaa
                                                                      600
tgttgtaaaa actettttae agettattgg gattteatet ttatttattg cagecaaact
                                                                      660
tgaggaaatc tatcctccaa agttgcacca gtttgcgtat gtgacagatg gagcttgttc
                                                                      720
aggagatgaa attotoacca tggaattaat gattatgaag gcccttaagt ggcgtttaag
                                                                      780
tcccctgact attgtgtcct ggctgaatgt atacatgcag gttgcatatc taaatgactt
                                                                      840
acatgaagtg ctactgccgc agtatcccca gcaaatcttt atacagattg cagagctgtt
                                                                      900
ggatetetgt gteëtggatg ttgaetgeet tgaattteet tatggtatae ttgetgette
                                                                      960
ggccttgtat catttctcgt catctgaatt gatgcaaaag gtttcagggt atcagtggtg
                                                                     1020
cgacatagag aactgtgtca agtggatggt tccatttgcc atggttataa gggagacggg
                                                                     1080
gageteaaaa etgaageact teaggggegt egetgatgaa gatgeacaca acatacagae
                                                                     1140
ccacagagac agcttggatt tgctggacaa agcccgagca aagaaagcca tgttgtctga
                                                                     1200
acaaaatagg getteteete teeccagtgg geteeteace eegccacaga geggtaagaa
                                                                     1260
```

```
gcagagcage gggceggaaa tggegtgace accecateet tetecaceaa agacagttge
                                                                     1320
gegeetgete caeqttetet tetgtetgtt geageggagg egtgegtttg ettttacaga
                                                                     1380
tatctqaatq qaaqaqtqtt tcttccacaa caqaaqtatt tctgtggatq qcatcaaaca
                                                                     1440
gggcaaagtg ttttttattg aatgcttata ggtttttttt aaataagtgg gtcaagtaca
                                                                     1500
ccagccacct ccagacacca gtgcgtgctc ccgatgctgc tatggaaggt gctacttgac
                                                                     1560
ctaaaggact cccacaacaa caaaagcttg aagctgtggg agggccacgg tggcgtcgtt
                                                                     1620
etteettege aggtgtttet ggggeteegt ttgttaceca agtgggagea ggtggtttge
                                                                     1680
ggggcaagcg ttgtgcagag cccatagcca gctgggcagg gggctgccct ctccacatta
                                                                     1740
tcagttgaca gtgtacaatg cctttgatga actgttttgt aagggctgct atatctatcc 、
                                                                     1800
attttttaat aaagataata ctgtttttga gac
                                                                     1833
```

```
<210> 5654
<211> 855
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (310)...(809)
<223> similar to gi3025832 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5654
tgactgcccg tagaggaaac gacattcgga gctgcgctcc cgcccaggcc ggccctgccg
                                                                       60
cgggcctcgt cagccagtaa cagggagcag aggtgggagt tagcgaggcg accacgaaaa
                                                                      120
cggtgaaggt cggaaccgac agcctcctcc gagaagggca ggagctggga ggaggcggca
                                                                      180
gcggcggcgg cagaaacagc agcggcggcg gcggcggcag ctgqqaqqaq qtqqtqacqq
                                                                      240
tggcaacggc agcgtcgggg acgatggcgc gactcgtggc agtgtgcagg gacggggagg
                                                                     300
aggagttecc cttcgagagg aggcagatte cectetacat agacgacace etgacgatgg
                                                                      360
tgatggaatt teetgataat gtgttaaate tegatggaca teagaataat ggtgcacage
                                                                      420
taaagcagtt cattcagcga catggtatgc ttaagcaaca ggatctaagt attgccatgg
                                                                      480
tggtgacatc acgcgaagtc ctgagtgcac tttctcagct tgtcccatgt gttggttgtc
                                                                      540
gtcgcagggt ggagcgtctc ttttcccagc ttgtagagtc tggaaatcct gctcttgaac
                                                                      600
ccctaacagt agggcccaag ggagtcctgt ctgtaactag aagctgcatg actgatgcaa
                                                                      660
agaagettta tacattattt tatgtacatg ggtecaaact aaatgacatg atagatgeta
                                                                      720
ttccaaaaag taagaagaat aagagatgtc agttgcactc cttagatacg cacaagccaa
                                                                      780
aacctttggg aggttgatgg atggatgtat gggaactaat gtcgcaggaa tgcagggatg
                                                                      840
aagtagttat aattg
                                                                     855
```

```
<210> 5655
<211> 5663
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1)...(5664)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (5501)...(2237)
<223> similar to gi33942 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5655 tttttttttt ttgatgaaat agataattca ggttgtcatt tataatttta gagtttgctt 60 cacatataca atgctgtgtt acgaaacaat gaacactttt ataaaaaatt tatttcacac 120 ttttatacaa atatccacag gtaatttcta atcatgaaat aattttacaa tgctagttag 180 tacaaaaatg tatcaaatgc aaacagacca gtgacttgac ttgagatgac atttttaaca 240 accataaatc taaacaccat aacatctttg tttctttgtt gaaccaccct cccaacaccc 300 ttttcaggac attcatcttt tttttagtaa cacaggtcta aaaacactgt caaagtatca 360 geteettage aatetageaa tetaaacaca ttagggacac aagtteecca agcaagaaac 420 tgagacttta aacactgtta taacctgttt tacagaaatt tttgtaaaca aaatatattt 480 tgtgactaag aattccaaag tacaaccaaa acaacgtcct tagtatttta aggtttaaga 540 tttccgaaaa gaaaaaagcc cccccaaaac aacagtggcc ctacaaactg tgttttattc 600 tttcaaaaca cagacactgc ttatactata tccaaaacaa attagcacct gtttgctgtt 660 gctccccata taacttaaca ttgtgaagca tggtaattaa aaaaaatcag ctttcatatc 720 tattcagtct ctgttgaatg tatagagtaa tcattccacc ccctgccatt tttacaatta 780 aaacacaatt taaagttett gttaaattag ceecaaagta atttttggga atacagatag 840 gggaggaaac aaaacaáaaa atagaacatc gactcactga ttaactgttt tggtagcäga 900 ttcagtagtc ttatactgga tcagtttgga tccaccatag gcattcacca tttctttcaa 960 gteetgaata tacagtatti geageagtga gtaaacegea etagagttea gtgaataaae 1020 ccattttctc caagaattcc tgaatgttac agtatgaaat ccagaaacat tatgcaggct 1080 tctaaagtaa aaaatatcca atgcctgaaa taaacatctt tacagttata attctatttc 1140 ttaaaccttt tgggttgtgg ggtggaggct gtcatgaagg agaggttata gtttatagat 1200 aagttattaa aacaactete tetggtacat ttataaagat titetiittig cagtaaataa 1260 tttaggtcaa agtgatgacc tcccatgctc taattctaat tctgattgat taaacccaac 1320 ctgaagggta aactggagac tctttggcct gttagtcaat aacaaaatgg tttgtaaaga 1380 aaagaaaaaa taaataccat atacaaataa gtataactag cattcaagtc tgttgcacct 1440 gtgtgttttt agtgaaaggg agaatgaaac ttgtatgcat ttgacgtgag caggtattca 1500 cacagctagg aaacaggaaa agacggtagg atggcaacat caccttctat tgcaacattt 1560 agtttaaaag acagccactt tccgttgaaa acacaactac cccaaatggc atagtcttgt 1620 gatgtgggac agctaacgtg atggacgtet gegeageagg eeegaggtta ggaeggeeae 1680 totgttagtg caggtgagtg taggtgcctc ctcagctaca ctatctggag gatgtcacct 1740 gagtgcaact gggcaggccc ttccccaaca catqatqtaa qtcaqccacq ccaaaaacaa 1800 aggcaaccca gaaagttaaa ttacggcagt taaagaaaaa tccattccaa cagttttaaa 1860 tttggctgtg caaaacagga gccttaggct acgtaacaat atccacagtt aaaactgtag 1920 gttcgtactg tgtgtagtca ctctgaaatc agtcctcagg gattgagcag gcttttaaat 1980 ccaaattgaa tttctgagtt ggaaaaagca gtttgggtac tgtgaagctt tttttttt 2040 aggeceege tatgagtage tttcatttte gttccacttt gtgatecact gttttttte 2100 aaggttatca atatactttt aatttttgat ctctcgctct tctttccqqa tccttacaqc 2160 atggtatcgg ggaacactgt catcgtacct agagcgttta aagaatccac acaattacag 2220 aagtagatca atactatgca tcagaagtaa gcctctcttt atcagatggc tgagcatgga 2280 teteageett gtgatatgtg geateataat gatetttett atttetettg aagaaaceae 2340 acttccatag tataaacact aataaagcaa gcatcaagat cccagcgaga atagccacta 2400 ggatgateca ccaaggtact cccgaatact gagctacagt ctttgaggga aacacagtca 2460 ctcgaacctg agtgcctgca tttggcagcc tgatattttc ggcagcagca gtcacatcaa 2520 tgaaggeteg catgagaatg tecaagtagt teagtttgga atatteetet agaaatgtge 2580 tgttccataa cctcgagege aaaataagag acgccttgct gtccagecec cqcaqeqqqc 2640

atctgatgtt	cacacagttc	acgttcacgc	tacagttaag	agtctggtat	tttctttcag	2700
caaataaaga	aaattttctg	ttatcatcta	tctgtttttc	agtaatttcc	cgtttctttc	2760
ttgagttgtg	agactccgtt	aggttcaggg	agtttatctc	cttttgtggc	tcacaagtta	2820
ccttttccaa	tcctttggat	tctactttca	ccaaaataaa	gcaaccaatt	tccaattgct	2880
aatttcttt	ggccactgaa	tgttcaaggt	tgctgtgccg	aggtttgtaa	gaggtttacc	2940
taagtttatt	accctgaatt	catactctat	taaacttccc	acttcatctt	cagatttcat	3000
agcttgctcg	ccaacaactg	tacctccaaa	atacacctgg	gaaggtttag	caactcccga	3060
gaccgataaa	agcagttcaa	taaccacttt	tgctttagct	gtaattggag	ccaaattatc	3120
ttgattgctt	gttgtttcta	acttcagatt	aatatccaga	tctggggtgt	caaaggtgac	3180
ttcagttgta	cttaaaacca	aataaaaagt	gacatttgaa	tttcttttaa	aaggatttcc	3240
gagctcacag	tcagcttgcg	agccattctg	gttggcaaca	caactcaact	gtttctcagg	3300
gaaagccctc	agttctctat	atgcagaata	ggttaaagtg	tctggaaacg	ttgcaatcag	3360
tttagcctca	tgggcatcat	cgccatcttt	tgtgggattc	cttgggttgg	aagggctgtt	3420
tgtcactgtt	atttctaaag	caatatcctt	ctgatctttt	agaactagtt	ctggtacacc	3480
tttttgaatt	ggtaaataag	aaaatttgtc	ttgatttcct	tctcggggtg	caaaaattta	3540
tattctagtt	taagggttgc	tgttacatac	aatntgtcgt	ctcccacatc	ccttctttta	3600
agaagtgaac	atcaatatga	gctgtcttgg	gttcatctga	attcagaatt	ggaagaactt	3660
				gatctccact		3720
				gccacagggt		3780
cacactttct	gtttctgcct	cttcagagtt	agttcttgag	tatatttggg	ctcagaacct	3840
				ttctttcttt		3900
				ggttagcagt		3960
				acgctgtttt		4020
				taatcacagg		4080
				cagggtagga		4140
				atataccett		4200
				taaaaacctt		4260
				gattaatatc		4320
*				agagcgaatt		4380
				acctccaact		4440
				cccatccttg		4500
				tccatcgaat		4560
				cacggctcca		4620
				aacaatacct		4680
				gagactttca		4740
				catgtcaaaa		4800
				taccccgggg		4860 4920
				acaccttgct tccaatctcc		4920
				cgccccaaag		5040
aatccctcct	tcctattaac	aatgstgsg	ttttttaa	egececaaag	aacaaaatgt	5100
				ttgaccccc		5160
				atcaaactcg		5220
				tecegttetg		5220
				caacagccgc		5340
				gaggttcccc		5400
				gaaagctgac		5460
				cccggcggcg		5520
				cctgcgctcc		5580
					ctgcgcccgg	5640
	gggacggtcg				9-999	5663
	222-23-09	-3-				2003

```
<211> 610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(529)
<223> similar to gi498734 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5656 cggaggaaag ccttttgagt tcaaagaagt gtgtgaaagc cttgagcatt cgaaaaagcc 60 tcattagacg gttctacatc cacactggag agaagcccta tgagtgttga cagtgtggaa 120 agggttttac cegeatgtea gggeteacaa ggeeecagtg gatteataet ggagagaaae 180 cgtatgtatg cgtccaatgt gggaaagcct tttgtcggac cgcaagcctg attcgacact 240 ttagcatcca cactggagag aagccctatg aatgcgtgga gtgcgggaag gccttcaacc 300 gcaggtcacc cctcacaagg caccagcgga ttcacactgc agagaagtcc cacgaaccca 360 tccagagtgg gaacgtttct tgtgagagca cagatctcat tcaacactcc atcatccaca 420 ctgagagtag cccagtgagt gcagtgaata tggaaacgcc ttcaattgcc gctcattcct 480cctcactcga catcaacgga ttcatagtgg aagaaaccct accaagcaca gcagatgtgg 540 aaaggaagga ataaaaatgc ccaagaccaa acgaaagaag aaacacttta ttttcattgc 600 aaaaaaaaa 610

```
<210> 5657
<211> 1107
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1095)...(644)
<223> similar to gi3668416 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5657
ttttttttt ttgatggcta cttataattt atttataaaa cattttacca gtgagtgatg
                                                                       60
tetcaagtga gaggtggtaa cagatacaca aagcagttta tagcatqcaa tatttcaatq
                                                                      120
cetetgagag gtagaaacag ettgtgetet eagatggeee teagteette eeettgteat
                                                                      180
etttetgtee tagactgtgt cetaactget cacaagggtt cageggcatg caaacagtet
                                                                      240
ttaattggtt ttcttcaaag agggcattgt tgactgggaa agactgggct tgtatttaaa
                                                                      300
ctctggctct ttttgcaaat gacagacttt ctcaacagta tttccagagg aaaattttgg
                                                                      360
ttccggaaca gttaactgga atctgaccag attacagaca gcaccacccc atattactcc
                                                                      420
aatggctaag acacagcatc tttgattttc tgtatgtcat aacattctga agcttgagtt
                                                                      480
accgatggag ccatttttgc aactacacat cctccttata gttcttgctt tcctttcaag
                                                                      540
cagatcacag ggcccagggc aagatgattt ccttgaggag aagtagcctg agccttagaa
                                                                      600
atgcaatttg tataactgac cagectgget tteceeetee tttaqqaate tqattettet
                                                                      660
tectetteet ectecteete tteegteaca tgactetttg tgeteagete cagggttgtt
                                                                      720
```

```
tggttgattg atgcttcatt gtctacatgc accaacatat catgtgactg ttcaggtaca 780 gtgtgagaag acagcatctc atcccctct ctagaactga tcattgattg gagggctaat 840 tcttcaacct gtttgtttgt aaacctctaa attggcgca ccacagctag tgagtagcgg 900 agaactggcc gcagcaggtg gtcaccacag aggcccaggt tggggggaaa tggtcgctcg 960 ggaggaatgg aggagggca ggagagggc gcggggtcac cttgaggcgg ttcagctggt 1020 cgtgcagggc tgccttcaac cgcagcagcg tctcctcctc cttgcgcagt tcctgaagcc 1080 ggctcagcat gttgcctggt cacatag
```

```
<210> 5658
<211> 3443
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (235)...(2472)
<223> similar to gi30082 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5658 gcacgagtaa ggacagaaaa gtgaaatgca gtatggtgaa gaggataccc tgaatatgta 60 tgaagacatg ctgttgtgag acggagttgt gaaacagagg ccacagaagc tgttgtgaag 120 gcagagcagc atctgctgaa gagacagaaa ccagccccag aggtgtcaca ggaaggcacc 180 agcaaggaca ttggtctttg atttgattca gcagtcctgt caagtataaa tgtgatggct 240 gtgctgcctg gccctctgca gctgctggga gtgctgctta ccatttccct gagttccatc 300 aggeteatte aggetggtge etactatggg ateaageege tgecacetea aatteeteet 360 cagatgccac cacaaattcc acaataccag cccctgggtc agcaagtacc tcacatgcct 420 ttggccaaag atggccttgc catgggcaag gagatgcccc acttgcagta tggcaaagag 480 tatccacacc taccccaata tatgaaggaa attcaaccgg cgccaagaat gggcaaggaa 540 gccgttccca agaaaggcaa agaaatacca ttagccagtt tacgagggga acaaggtccc 600 cgtggagage ctggcccaag aggaccacct gggccccctg gtttaccagg tcatgggata 660 cctggaatta aaggaaaacc agggccacag ggatatccag gagttggaaa gccaggtatg 720 cctggaatgc cagggaagcc aggagccatg ggcatgcctg gggcaaaagg agaaattgga 780 cagaaagggg aaattgggcc tatggggatc ccatgaccac aaggacctcc agggcctcat 840 ggacttcctg gcattgggaa gccaggtggg ccagggttac cagggcaacc aggaccaaag 900 ggtgatcgag gacccaaagg actaccagga cctcaaggcc ttcggggtcc taaaggagac 960 aagggetteg ggatgeeagg tgegeeaggt gtaaagggge etecagggat geaeggeeet 1020 eceggeeetg ttggactgee aggagtggge aaaccaggag tgacaggett ceetgggeee 1080 ccagggcccc ctggggaaag ccaggggctc caggagaacc tgggccacaa ggccctattg 1140 gggtaccggg ggttcaagga cctcctggga tacccggaat tggaaagcca ggccaggatg 1200 gggatcccag gccagccagg atttccaggt ggcaaagggg agcaaggact gccagggcta 1260 ccaggacccc caggcettcc agggattggg aaaccagget teccaggacc caaaggtgac 1320 cggggcatgg gaggtgttcc tggggctctt ggaccaagag gggagaaagg accaataggt 1380 gccccaggaa tagggggtcc tccaggagag ccaggcctgc ctggaatccc aggtcctatg 1440 ggccctccag gtgctattgg ttttcctgga cccaaaggag aaggtgggat tgtagggcca 1500 caggggccac caggtcccaa gggtgagcca gggcttcaag.gcttcccagg aaagccaggt 1560 ttccttggtg aagtagggcc tcctggcatg\aggggtttcc caggtcccat aggccccaag 1620 ggggaacatg ggcaaaaagg tgtaccagga ctccctggtg ttccagggct tctcggacct 1680 aagggagaac caggaatccc aggggatcag ggtttacagg gccccccagg tatcccaggg 1740 attgggggcc ctagtggccc cattggacca cctgggattc caggccccaa aggggagcct 1800

```
ggcctcccag ggccccctgg gttccctggt atagggaaac ccggagtggc aggacttcat
                                                                     1860
ggccccccag ggaagcctgg tgcccttggt cctcaaggcc agcctggcct tccaggaccc
                                                                     1920
ccaggeette caggaettee aggaetteea getgtgatge eccetacace accaetteag
                                                                     1980
ggagagtate tgecagatat ggggetggga attgatggeg tgaaaceeee ceatgeetae
                                                                     2040
ggggctaaga aaggcaagaa tggagggcca gcctatgaga tgcctgcatt taccgccgag
                                                                     2100
ctaaccgcac ctttcccacc ggtgggggcc ccagtgaagt ttaacaaact gctgtataac
                                                                     2160
ggcagacaga actacaaccc gcagacaggc atcttcacct gtgaggtccc tggtgtctac
                                                                     2220
tactttgcat accacgttca ctgcaagggg ggcaacgtgt gggttgctct attcaagaac
                                                                     2280
aacgageceg tgatgtacac gtacgacgag tacaaaaagg getteetgga ecaggeatet
                                                                     2340
gggagtgcag tgctgctgct caggcccgga gaccgggtgt tcctccagat gccctcagaa
                                                                     2400
caggotgoag gactgtatgo ogggoagtat gtocactoot cottttcagg atatttattg
                                                                     2460
tatcccatgt aaaaacaaaa aaacaaaaaa caaagaaaag aaagagattt tatagaagaa
                                                                     2520
aatgacacac caaaaaatcc aaatgaaaaa cataattgct tcaaaacact tacacagttg
                                                                     2580
gaaagttata tgtaagtgaa aatttggacc attgtgtaca aataaaaact aagatgcatq
                                                                     2640
tttaatactc cacacagcag cctgtaattg cgaatgatgg gatagagtta tgtatcaagt
                                                                     2700
actgacactt ggttgtaccc actggaatca tattagctgt tttatgttat atgcttccac
                                                                     2760
agtaacctgc ttattcagat cagtcaaaat atatcagtat gaaagatcat agctaatgaa
                                                                     2820
aggcactcac tcatattgtt tactttaaaa tatttataaa tatgccttaa aqaaatacaa
                                                                     2880
atgataacaa ttacataccg tatttacttg cttaatttcc tctgtatttg tgtagatact
                                                                     2940
ttgacatgga atatatggtg gggagacccg tagtgttacc gccccagtgg gagggggccc
                                                                     3000
tggggaccct ggtaatgett tagteaaagg gatatetete ttgtateaga ggetgtgtet
                                                                     3060
tttagtaaca ggagtcctcg tcagaattgc gtgtctgttg tctctaaaag aatgggtgaa
                                                                     3120
ccaatcggcc tttgtgaatt tattcagtgc cttctctgta ccaagcactg ggtaaggcac
                                                                     3180
ttttgtggag cattagacag taaccetcaa ggagctagag aaccggatgg gagacatgag
                                                                     3240
cggtaattaa ctcacttgtt ccccagagtt tctatttgtt ttgattttct ttttctgtga
                                                                     3300
cttattttcc tattttcttt cctccatgta attttcacta tggcccaact aatataaaca
                                                                     3360
cctggaaatt acaaggaaaa aaaattcttc ctctaataac tttccaaatt tgtggaatat
                                                                     3420
ttatttggaa tagcaggtat cag
                                                                     3443
```

```
<210> 5659
<211> 2091
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (365)...(1924)
<223> similar to gi4335949 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5659
cggacgcgtg gggccaatgt tggagccgtc tgcaaagtgt ccccggcaag aagaggctgc
                                                                       60
ctaccacaag gactttagct tactttttaa agattgaaga aaaaaaaaga agacagaaaa
                                                                      120
agaagaactc aaagatacac aaagtaattt gaaccaaggc tcaaaagttt ttggagccgt
                                                                      180
gagggataca gcagtttggt caatattgtc ttaacatgct tcaaataaat cagcttctct
                                                                      240
ccaagataaa atggcaaacc caaaagagaa aactgcaatg tgtctggtaa atgagttagc
                                                                      300
ccgtttcaat agagtccaac cccagtataa acttctgaat gaaagagggc ctgctcattc
                                                                      360
aaagatgttc tcagtgcaac tgagtcttgg tgagcagaca tgggaatccg aaggcagcag
                                                                      420
tataaagaag gctcaacagg ctgtcggtaa taaagctttg actgaatcta cgcttcccaa
                                                                      480
acctatttag aagccaccca aaagtaatgt taacaataac ccaggctgta taacaccaac
                                                                      540
```

```
tgtggaactg aatgggettg etatgaaaag gggeagagee tgeeateeae aggeeattag
                                                                      600
atccaaagcc attcccaaat aatagagcta attacaactt tcaagtcatg tataatcaga
                                                                      660
ggtatcattg cccaatacct aagatctttt atgttcagct cactgtagga aataatgaat
                                                                      720
tttttgggga aggaaagact cgacaagctg ctagacacaa tgctgcaatg aaagccctcc
                                                                      780
aagcactgca gaatgaacct attccagaaa gatctcctca gaatggtgaa tcaggaaagg
                                                                      840
atatggatga tgacaaagat gcaaataagt ctgagatcag cttagtgttt gaaattgctc
                                                                      900
tgaagcgaaa tatgcctgtc agttttgagg ttattaaaga aagtggacca ccacatatga
                                                                      960
aaagetttgt taetegagtg teagtaggag agttetetge agaaggagaa ggaaatagea 🕐
                                                                     1020
aaaaactctc caagaagcgc gctgcgacca ccgtcttaca ggagcttaaa aaacttccac
                                                                     1080
ctcttcctgt ggtggaaaag ccaaaactat ttttttaaaa aacgccctaa aacaatagta
                                                                     1140
aaggccggac cagaatatgg ccaagggatg aaccctatta gccgcctggc gcaaattcaa
                                                                     1200
caggccaaaa aggaaaagga gccggattat gttttgcttt cagaaagagg aatgcctcga
                                                                     1260
cgtcgagaat ttgtgatgca ggtgaaggta ggcaatgaag ttgctacagg aacaggacct
                                                                     1320
aataaaaaga tagccaaaaa aaatgctgca gaagcaatgc tgttacaact tggttataaa
                                                                     1380
gcatccacta atcttcagga tcaacttgag aagacagggg aaaacaaagg atggagtggt
                                                                     1440
ccaaagcctg ggtttcctga accaacaaat aatactccaa aaggaattct tcatttgtct
                                                                     1500
cctgatgttt atcaagagat ggaagccagc cgccacaaag taatctctgg cactactcta
                                                                     1560
ggctatttgt cacccaaaga tatgaaccaa cettcaaget etttetteag tatateteee
                                                                     1620
acatogaata gttcágotao aattgocagg gaactootta tgaatggaac atottotaca
                                                                     1680
getgaageca taggtttaaa aggaagttet cetaeteece ettgttetee agtacaacet
                                                                     1740
tcaaaacaac tggaatattt agcaaggatt caaggettte aggttcacta etgtgataga
                                                                     1800
caaagtggca aagagtgtgt gacctgtctg acattagccc ctgtgcagat gactttccat
                                                                     1860
getattggaa getecattga agecagecat gateaggtat aatatgeeac tgecattttg
                                                                     1920
ctgtgttatg gcccagctcg gaaatggaag gccatcaaaa tggaagctat gtgcgcacat
                                                                     1980
gcagctttgc tttccttaat acattatctg ctagcaccat ctgctagact tgaaaaatca
                                                                     2040
aaattgtttg cgttgggaaa ttgatatcat agtagattta aattatttta a
                                                                     2091
```

```
<210> 5660
<211> 3880
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3774)...(1514)
<223> similar to gi605 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5660
ttagaaggat aggggaagag attaagtaat tgcagtttaa catgaaaaat gcacatgtga
                                                                       60
tagaatggag cacaatggag gattcataaa acatgctcat cagaaaaatc tgttaagtcg
                                                                      120
actitgtcca gattcagaaa gagtaagtit atcaacatci ggcatcccic atactitgtg
                                                                      180
aagatagatc ttctactgct taattatgag aaattatttt attcaaagaa aggagctctt
                                                                      240
aatcttttga taaaacaaaa taaaggagta gagagctgac tagatgtcaa gtgcttgcta
                                                                      300
gaaatgattt ttaaaatgct tctacacgta aaatgtactg acaaattttg gtaaaccatt
                                                                      360
taaaaataag aattagtttt aaaatcttgg agaaaatgcc tttttgccca catttaaaac
                                                                      420
tgaaaatcaa ttttactata gataggagtt ctgtggagtg tacaaaattc cttttagaga
                                                                      480
tcaaatggcc atcccagata gatatcatgt ttcacaggca ttacttttag tcaccctcaa
                                                                      540
gtttcagcca tgggaccaaa atttagtgtt ctgtgccatg tggtcacagg gtcattggtt
                                                                      600
tcacatcatg gcttaagaaa atactggcat tttgtttctt acgaagtaag tcctaccttg
                                                                      660
```

```
720
tgcatccaag caaaaagaaa aaggaagaaa acaggggagg gaaaggcgca agaagctttt
tttgtttgtt tgttttgaag acaacagatt gaaggcaaaa aaacacagag ctttcacaag
                                                                      780
ctcaaagaaa aatatttgct ggctgatcgc tgatttgtat gcactataaa acaattccat
                                                                      840
aaataaaacc aatatatcat ttcttaatca tgaccctatc aaaaccaagt tatttcctaa
                                                                      900
ctattettte aatgteaaat gtaceetaga gttgaegttt catttttaag ggttaeaget
                                                                      960
acctcatagg aactgaacta gatgtactct taccetttet etgaagtata acagtacace
                                                                     1020
actgcacaac agtatccaat ttgaagacta atggtaaaga aaattcttca ggaaaaactg
                                                                     1080
aaaatccatc aagctgaaaa tctaaaatta gttctacttt ctaatgaaaa atacataaaa
                                                                     1140
gtgcatcatc agaataagta attcttatgc cagtttgtat tgcaaatttt ccaaacaatg
                                                                     1200
catcaaacat aaacccaatc cagatgtcaa ttatgaatac aaatatagct tgaggttgtt
                                                                     1260
ttttttaaag gcagtaattt ttgaaatagt taatgcaact gttgctaaca caataataat
                                                                     1320
agtactectg getteacata etaacetgga etteegatea agtgetgatt ageecagtaa
                                                                     1380
gggaggtcac caaaaaaccc aaatccattt cagtcatgtc tagtcttgta ccctccattc
                                                                     1440
tcctttttta gcatttgaag acaacaggtt gagttggcag atattgttta tggacccctg
                                                                     1500
aggttgtttt taccgattca atctcagttt tattgaattc tigataacag gaataggatt
                                                                     1560
tgcagggaga gcagggatat cagaaaggtc tgtactggat gttttctgag aggccaacag
                                                                     1620
agaagccgct gtctgaatag tttctgattg agttgtactt gtctctgtat caagttqttc
                                                                     1680
ctttgcttct gttttatcat gtccactcaa agcaagacag ttagcatctt cacttgtttc
                                                                     1740
atcetettet gttttggttt tettgggaet etettetttä tgaggtgagg atgteetett
                                                                     1800
gactectact ataggagtag gtatttttgt tgetgeattt cetgaagttg etgeatttee
                                                                     1860
tgaagatcta ggtggtgggt ttaccagacg tgttgaagaa acaactctgg agaccgtagg
                                                                     1920
ctttggtggt ggagaaatgg ctggttgtgt ggcagtttga ggaatgcttt cactcgatgt
                                                                     1980
accccctgag ctttcactgg aatttacttg tggcacagaa acttcagtag cctgtatgtt
                                                                     2040
ggtcacagat gctgctgtta cagctggagc aggactgttt ctgccctgag agctgccaga
                                                                     2100
actgttcaat ggactggtct tegtagcact agtaggtgaa ggcacagaca tgctgttatc
                                                                     2160
actgtccata gacaagtcga ggctgctgtc attgagagct gtcaatttga caccttctgt
                                                                     2220
tgaatgettt ttettttet gaageacatg attaggtagt agttgatgga gttgetttet
                                                                     2280
ttttacatgc attgcagcaa ttttcatatc cacctcaaac atcttgctgt ttattgcttg
                                                                     2340
cctataaact gtatctgtga aagactgaat atcataggtg agatcaacac tgaggttttc
                                                                     2400
agagttttct gtttttttaa acactaaccc aatcacccac atcgtgcgaa attcttcctt
                                                                     2460
gtcgggattt tctttgggtg ctggaaatga ctggggattc acatgagcca gtgtaataaa
                                                                     2520
tteattette tecaagette caaccaggat teggattitt gattecacca ageceacca
                                                                     2580
ttccaggogt tgattttctg ttggtgcact tgctagaagt acaatataat gcttgtactt
                                                                     2640
ttgaaagaag tttggagett caaaaagttt ggaccactet geettactea geaaaattte
                                                                     2700
atctgtgata gcaagacctt gtttaaactc ctcaaccatg accatccgtg ttgaaacgga
                                                                     2760
cacattgtac gtggagttct gttgtgggta tgctggtgta attataggca taagatggta
                                                                     2820
cctatcactg gggtttaccc ttgggtccca tacaggcaaa ttaagattgc attcttcagg
                                                                     2880
ctgtttcaat agcactggat ttggccattc ccatttagaa aataccaaga aaaatttatg
                                                                     2940
tacaagagtt gatgctattg catttggata aagctggcaa gttcttgcta ctagcatagc
                                                                     3000
ccaggaaaca ccaccgagga aacctaatat attggaatag atgttgtggc gtttggccca
                                                                     3060
tagtttgata gctctcagag ttaacctgaa gttgtcaatg tttggtacta gatgtaaaat
                                                                     3120
ttcatcggtt accctgcaac cgttaagact tcttatacat cttatatcta aattttttag
                                                                     3180
cagactgtca totogtagat ccaaatotto aggaattgto tqcaqtqcta atottqcaaa
                                                                     3240
caaaatatca atctctatcc catcaaaaca gagtttaata actggtacga atgcctcttc
                                                                     3300
aacagetett aaatetttta ettetteetg taattteaac ttateataga atgaaggtga
                                                                     3360
aaaagtcact tcgatcaaca tgtcttggtg caaacacaca aacgccatca atatcaqcac
                                                                     3420
cttttgtatg cacttcccta atctgtaaga tcccaaaatg taaaaatttt tcctccaaac
                                                                     3480
attiticeaat tacagatigt ggaagatict tggetiitea etgatitett egtateeact
                                                                     3540
cttttaccag gtttatttag tttttcccaa aattaaaatt cctgcggctg gcagttccct
                                                                     3600
cttccttctt caaaaacccc ccaaagggtt tcaatgtctc caattagttt tctgtgtaag
                                                                     3660
tacgcagtca gtctccttgg gggctgctaa gctgatagga gaagtaatgc catagtgctt
                                                                     3720
ctgtggcggt tgtgtttgtt gtgatccctg tgttgtaact ggaaacggca tcgtctccgg
                                                                     3780
egeogeaceg eccagteact tecececege aategeogee tgeogecetg gtatgateca
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ctgaggcggg agggaggggg gggcctgcct cagcctcgtc
                                                                     3880
```

```
<210> 5661
<211> 2379
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2011)...(395)
<223> similar to gi4808552 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5661

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ttatgctgag tgaaataagc caggcacaga aagacaaaca ctgcatgatc tcacttacat
                                                                      120
gtggaaccta taaaagctgc cettatacaa gtaaagagte aaatgetggt taccatggge
                                                                      180
tgggaggaga gggactgggc agatgtgtca aagaatacaa aatttcagtt aggaggcata
                                                                      240
agttcaggga tcttgtacag catggtgact atagttaaca acaacgtatt gtattcttga
                                                                      300
aaaaaaggag tgatataggg gtaccagaga tgggcaggat gattgaagat cacagtccag
                                                                      360 ..
cettgeagga ceceggggga cagggegge acteagaggt ggacetecag caggtagege
                                                                      420
aggegacaet ggeteteetg gtagatgagg tactegetet gggagaatgt ggagetgetg
                                                                      480
aactotgggo agggoacagg otggoootgg ggoaccacca ottgotggoo atcoagotoo
                                                                      540
aactcagtgt cetgggtegg atcaggeteg gtgtggeete gggeaatgae actgtegaag
                                                                      600
ccaggaggtg ggctcttcaa gctggggttg tccgtgttga tatggtgctc tctgcccagg
                                                                      660
gccacctcac ccaggaacat gtagccgaca tggtgggccc cacacttcat gccaataaca
                                                                      720
tatccagctg acttgctgtt ctctgaggca aagtagatgc ccttgccaac acgcccacca
                                                                      780
gaatgtggca tgatgcggag cccactagtg aggatggcgg ccaccacggc catgttggtg
                                                                      840
ccatgccaca gcagcttccg attacccagt ttggagtggg cctggaatct gtcttcctcc
                                                                      900
cettettggt ttactttcca gatgtgttga agtgtagggc acctgtggtt getgecagte
                                                                      960
tgttctaagt aggtctgtat caccttgtac tcaggtgctc cagagtctag cagctgcagc
                                                                     1020
tggcacttga gaagctggta gtctcggtcc agggggtgtg gcacctcctc caccgtcttc
                                                                     1080
tectgeteag agactgeetg cagggeetgg gecagetega tgteegeeag caccageage
                                                                     1140
atgtccttct tggcctgcag aagctcaggg gaattgatgg gcgggggctg gctgtggccg
                                                                     1200
aagttgtgcg ggatgacggt gtaaaagtgt gaggacagct cctccaggct ttggccacca
                                                                     1260
teegtgggge ettteaggge eteeteeage geeteeaagg eetegaaace eegtgeaate
                                                                     1320
tgttgcttgc tcagetttcc caggggcate ttettcacat ccaggtccat gagggccatg
                                                                     1380
gtgttettga acateteett getgaagatg ttagtgatga gettetgegt ggetgggtee.
                                                                     1440
agggageagg getgeaceg ettagteaca gteeteactg ggeetetgte cacetteace
                                                                     1500
acagetteet gggeeteate etetgeetgt acttegataa gtgtgtaett geeegggtga
                                                                     1560
gacacaaagt ggtcccgctc tgcccagttg ttcttggtct tttcccgaaa tttcttctca
                                                                     1620
aagteettet ttgeatette tageettgtg aagtggttga tetttgaetg geegaeetet
                                                                     1680
cccacacggc cccagcggtt ccagcaggtg aagaagcggt tgctgtcttg gagcagctgg
                                                                     1740
atgatgtaga acttgttgtt gttgttctcg aatgttggtc ttggttcagg gtgcaagttg
                                                                     1800
tagtcctcat acacetgggt coegggggtt tgettgettg agtggacatg ttggaateca
                                                                     1860
egeggattat gegetttett etgeggggta atggeetttg agggeeteag egggtggage
                                                                     1920
ggaaggggtc cttccttccc ttcctgcctg ccggcccttc ttcttctcag ggccctcagt
                                                                     1980,
ctgtacccag ggcttcggct ttggagccat ggccaagaaa agcagggaca tgggagaggt
                                                                     2040
cctggctgcc acccggcctg gttgtgtgcg cctcccaggg cagtcccagg tctagcaact
                                                                     2100
ctccatgage ctcaggegtg aattagggag agaatteeca acaategeea gaggeegggg
                                                                     2160
atgagettgt gtgggggatt agacategge tatttggeea eeagtggggt gaageagagg
                                                                     2220
ctggggcagg ccgagtcagg cgaccagtcc cacggacggg tggacactcg atctggcata
                                                                     2280
tecaaggeeg gggeagtege gteegtageg etgeteatgt ggeeggggee tgeageaege
                                                                     2340
atcagccggt cgcgcggtga ccttgggccc ggaacgaaa
                                                                     2379
```

```
<210> 5662
<211> 2113
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (508)...(276)
<223> similar to gill77607 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5662
ttttttttt ttgagacaga gtcttattct gtcacccagg ctggagtgca atggcgtgat
                                                                       60
ettggettae tgeaacetee geeteecagg tteaageaat tetegttgte teageeteec
                                                                      120
aggtogotgg gactacaggo atgagocaco acacceagot aattititigt attittagta
                                                                      180
gagacggggt ttcgccgtgt tgaccaggct ggtctcgaac ttctgacctc aggtgatcca
                                                                      240
cccacctcgg cctcccaaag tgctgggatt acaggggtga gccactgcat gcggctgaag
                                                                      300
gtaaggattc taaactcgga gactagaaat gtcctaaagg tgtctgcaac attggatgag
                                                                      360
gagtacaagt gcatttttct gggatgattc ctcccttttt atcacattct cagaagtatc
                                                                      420
tttgattcag aagagttagg aatgeeteee tattteagtt gggttttetg eeetttetee
                                                                      480
acagaggtcc agactcattt tgcttaattt tttttctagc tggggcctgg gaggtagagg
                                                                      540
ettcagggcc tgggtggtag agetgeetga caagtgttea geagggetge tgggteaggg
                                                                      600
ccctgtgggc cttctgaccc aacctgaaga tgggtctgct aagtctaaca aggtcaaggg
                                                                      660
aagatcagag ggacccagat tetttttat ecceeattg aaacggagte ttgetetgte
                                                                      720
gcccaggctg gagcgcagtg gtgcaatctt ggctcactgc aacctccgcc tccctgaccc
                                                                      780
teacactgic cagigeeett giggitacte ageateatat etigagactg geetggeagg
                                                                      840
agccagtgac tgtggaatga ccacagaaga ttcagggcag ctgccagacc aggggctatc
                                                                      900
tetgecetge getgettetg etcaagagag gttgtcacta geetetgate tteeettgaa
                                                                      960
gaaccegact ggggctcttc agagggtggg gcccaggaag ttgtagttaa ccccttcccc
                                                                     1020
aggcagtcct tacacggcca tctaggtatg cctgggaacc ttgcaccagg tcggtggttc
                                                                     1080
teactggetg eccattggaa ttatetgggg ageettetgg aaaegeagtg ettacattee
                                                                     1140
atctccctag accaacagaa actgccctct ggaggtgaat cccaggctta gagattctga
                                                                     1200
tgattctgcg gtccagtgag tgctgagatc tgtcctgagc tctgtgggga ggggcctgga
                                                                     1260
ctgatcactg cttggaaatg attttgccct acagtaggcc ttcaagttga tcaaatgcat
                                                                     1320
gaatgagcaa gettttettg gagtttgtga tgaagcecag gaaccgggtg ettgeagteg
                                                                     1380
teccataagg eteccaggga caagetagag aatetggetg teectetgte tecatggtge
                                                                     1440
cagccctctt) aggctcagtt caaagggaga ggaggctagt taaataagaa actgagagaa
                                                                     1500
acatggagca ttattgattt attagaaaaa ctagtaaatg ggtttcctct ggttggtgga
                                                                     1560
agcacggttg agcaggtgga ggacaggacc cagctggccc cagggccagc cccagattgc
                                                                     1620
atggtctgtg cccaacaggg ttgcattcct ctgcagccgc cgcctcctca tttcctccct
                                                                     1680
gagettgttt gtecaageea ecaageeatg tggteeeget ggetteatee teetetggat
                                                                     1740
tectgeecee eteccatgaa gggaggaaga ggatteaggg teageetagg ggaecetgge
                                                                     1800
teceteegat aggeaggaag gaggaggagt geggaggaga ggetgageet tecaegggee
                                                                     1860
tectgttagg ggtgttggtg gaggecaggt tggtgaggga agectaagga ceetceacae
                                                                     1920
ctcccacage cagagtcagt tgaggctggg acaaagggga aggagagagg gaaggaggac
                                                                     1980
egectgacet tgeccagaag gagetteete taaaetgeee tgggaaggaa geetggtatg
                                                                     2040
ctggtgtgga ctggagctgt gtcaacctcg tttgggaata ctgtcaaaag actgtagagt
                                                                     2100
agaataagga gag
                                                                     2113
```

```
<210> 5663
<211> 4450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (65)...(1861)
<223> similar to gi3882251 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5663
aaatgatgtc agagattttt ttcatgggct ccgtgttgat gcagtgcatt tgttgaaaga
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tcatgtaggt cgaaataatg ggaatggatt ggttaagttt ttctcccctc aagatacatt
                                                                      120
tgaagctttg aaacgaaaca gaatgctgat gattcaacgc tatgtggaag ttagccctgc
                                                                      180
cacagaaaga cagtgggtag ctgctggagg ccatatcact tttaagcaaa atatgggacc
                                                                      240
ttctggacaa actcatcccc ctcctcagac acttcccagg tcaaaatcgc ccagtgggca
                                                                      300
gaaaagatca aggtcaagat caccacatga ggctggtttt tgtgtttact tgaaagggct
                                                                      360
accatttgaa gcagaaaaca aacatgtcat tgatttttt aaaaagctgg atattgtgga
                                                                      420
agatagtatt tatatagett atggacecaa tgggaaagea actggegaag getttgtaga
                                                                      480
gttcagaaat gaggctgact ataaggctgc tctgtgtcgt cataaacagt acatgggcaa
                                                                      540
tcgctttatt caagttcatc caattactaa gaaaggtatg ctagaaaaga tagatatgat
                                                                      600
tcgaaaaaga ctgcagaact tcagctatga ccagagggaa atgatactaa atccagaggg
                                                                      660
ggatgtcaac totgccaaag totgtgccca cataacaaat attocattca gcattacaaa
                                                                      720
gatggatgtt cttcagttcc tagaaggaat cccagtggat gaaaatgctg tacatgttct
                                                                      780
tgttgataac aatgggcaag gtctaggaca ggcattggtt cagtttaaaa atgaagatga
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tgcacgtaag tctgaacgct tacaccgtaa aaaacttaat gggagagaag cttttgttca
                                                                      900
tgtagttacc ctagaagata tgagagagat tgagaaaaat ccccctgccc aaggaaaaaa
                                                                      960
gggattaaag atgcctgtgc caggtaatcc tgcagttcca ggaatgccca atgcgggact
                                                                     1020
geceggtgtg ggaetgeeca gtgeaggaet teeeggtgea ggeetgeeca geacaggaet
                                                                     1080
gcctggttca gcaataacca gtgcaggact gcctggtgcg ggaatgccca gtgcaggaat
                                                                     1140
acctagtgca ggaggtgaag agcatgcctt cctgactgta ggatcaaagg aagccaataa
                                                                     1200
tgggcctcca tttaactttc ctggtaattt tggtggatca aatgcctttg ggccaccaat
                                                                     1260
ccctccttcc agggtttagg gaggcgggc ttttcgtgat ggttaggcct ggtatgcctt
                                                                     1320
cagttggaaa cagtggtttg cctggtctag gactggatgt tccgggtttt ggaggtggac
                                                                     1380
caaacaattt aagtgggcca tcgggatttg gagggggccc tcagaatttt ggaaatggcc
                                                                     1440
etggtagett aggeggteee eeggggtttg gaagtggeee teetggtett ggaagtgeee
                                                                     1500
etgggcattt gaggtgggcc accagctttt gggcctggcc ccggccccgg ccccggccct
                                                                     1560
gggcccaatc ccatattggt ggttccccct gggctttgca tctagtttct ggaaaaccag
                                                                     1620
gaccgacagt aattaaagtg caaaacatgc cctttactgt gtctattgat gagattttag
                                                                     1680
atttetttta tggetateaa gtaateeeag geteagtgtg tttaaaatae aatgaaaaag
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gtatgeceae aggtgaagee atggtggeet ttgagteteg ggatgaagee acagetgetg
                                                                     1800
tcattgactt aaatgacagg cctataggtt caagaaaagt aaaacttgta ttagggtagc
                                                                     1860
cattcacatc attititata gggtagatct tcatattgct gtgattaatg catccagatt
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gttttcctag tatttccagg ttagaacctg tggattgttc caatggccat atagcttggt
                                                                     1980
ttccataaca tcgagcagca ttggttgact gtttacagaa agactcactc cacccaggat
                                                                     2040
aaacattget gtatgttaee agtaaageta tetggagaga acacataaat gattttggge
                                                                     2100
ataccattag aagaaaccat ttgtaaactt caaattacca caataaggct tatcaaggag
                                                                     2160
totaggattg gttttgtttt ataccatatg ggatgaagaa aatagaaatg tcaqtagaac
                                                                     2220
tcattgaggg tgctcttgcc agctgctgaa aatagaagtt ggctactctc agaatttggt
                                                                     2280
```

```
ttaaaaqctq qacagatttq ccttqttaat agggtaaagc tttgtcctaa aqtccctcat
                                                                     2340
tttcctttta aaattgaata aaatttctgt atacagattc attgtatgta cctttattgc
                                                                     2400
cttccttaag ggtccttgct gtatagacag tcctgccttc agaaggttgc tgctttgttt
                                                                     2460
gtctaattga ctcatttgta aatgagcaga actgttttgt gggttttttt ccctaaatat
                                                                     2520
aaaagtccca cacttcgttt gtgctataac ctcaaacttt gatttctaat gtcacactta
                                                                    . 2580
aaactgtgtg gaataagact tttgccataa aaataaacta tggagtcctt tatctaccaq
                                                                     2640
agcetttttg gtttgacege caegatttag gttagteagt ttaaaaattg tteatgttgt
                                                                     2700
ttggatggta tcgaaaacca gaaaccactt ttaataatgt gtttaagata cttgatttga
                                                                     2760
agtccttttc atatggacta attgtagtat caatttcctc ctgtcccgat tatgtgaaat
                                                                     2820
tttggccttt aaacaaagag gggcccattc ataagaaagt gttatatcta ggtttttaaa
                                                                     2880
actgaagttg aaattatctt tgttagcagt agtagtatag aataaaagat ccgtatgctg
                                                                     2940
gttegtagat tgataegtgt tagteetgtt attttggagge tttttggeat agttgttega
                                                                     3000
tcaggagcct gtttactaaa agtcttcata cagagtacaa gtgcagccgc cagaggagaa
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aattgagatt cttgaccctt tcatactctt ttctttggta ttcaggacac taaggcagga
                                                                     3120
ggaccacatg agttctggtt ggtaagtgtc cttgtcatga aaacacttgc cttacaaggc
                                                                     3180
totaattatg atttccctag toagtgctct gaagatgtgt cacattatat tataaacaat
                                                                     3240
acggaagggg agataggtga gatgatatga aaaacaaatt ttctcactgt cataaaaggc
                                                                     3300
tetaattatg gttactttee ttgtgatgaa aaacttggee ttacaggget etagttatgg
                                                                     3360
ttactttccc tagtcaatgc tctgaaaatg tgtcacatta taaacaatac agaaggagag
                                                                     3420
atagatgaga gatcatgaaa accaaatttt atcttttaca tggccccttt gtcttcqttt
                                                                     3480
gaaacatccc caacatttcc tacaaatcag cgtagttaca aaggggtcag tcttttaaaa
                                                                     3540
taagtatttc ctattaaact atatatata acagtgcctt tttggtgttg tgagtcagtg
                                                                     3600
gaacactgaa atacageggt tgtgtaattt aagagtggca acagttteat ttgataagat
                                                                     3660
ttgaaaaggc tttttatcac tacaatctta gaggattgac agtacaggat ttttgtttaa
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gagaaggatt gtttagactc aagaggtgac tatgttgtgg gtcttttgat aattcatgaa
                                                                     3780
tacagatttg ctttgaccga tcactagata ctgcctcctc aatttcaaaa gcaatataac
                                                                     3840
gtttgtatat gctgtttaat ttaagttaat gttaagtaat catttctcat tccaaagaca
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atgcaaaaaa cttcagcact gcttgagagt tgtatttcag ccacagatat tttctccatt
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ggaaagctat tttcatttta gaaaaatggg ttgtttgaag atgaaagtct tttatctttt
                                                                     4020
ttcacaattt attttggtta tatgttcgta cattcttatt aaatatttca tacactttat
                                                                     4080
tgcaactact ttgttatttc tacatcttag ataaatgctg aaaaggaaaa cgatttcatt
                                                                     4140
gttcatctaa ttaaataaat taaaagagcg gtttgtgtag aaattggaga gaactatgtt
                                                                     4200
ttatatgaat cacaacagtg ctcgttgtgg actgtaatta aatgctttgc cctctqqaac
                                                                     4260
ttgatttttg tgtatctgag atttattaac agtgctaact gctaaggata ctgtttatct
                                                                     4320
tgttctgggc attggagttt cagtttttaa aaaattcttg aaaatgtatt ctgtgaaact
                                                                     4380
actcatacct ctcttcctgc gaattttctc ctaagaacta ggtttggggt agaaatgaat
                                                                     4440
tgacattatt
                                                                     4450
```

```
<210> 5664
<211> 659
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (356)...(600)
<223> similar to gil389766 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
cataggttgg aaactgaaac ctgcacattt gtggcaaatg tcactgcatt tacagggaga
                                                                        60
 gaaaqaaaac cacatqactc ttctttgtat qttaaagact ttttattttc aqqccctttc
                                                                       120
 agaggaatca atteetttaa acetttgtaa aatgeeacag gageeaaggt taagegatge
                                                                       180
 ttttaactta ggaactgacc ctctccaggc agagtctcca aagtagatta cctcgaaatt
                                                                       240
 tcaaagaggc agttctacaa gaggagcctt tgaagaagcc aatcctgttt tccattgttt
                                                                       300
. tgctttcaca cacgggttga acttgaactc ttacctttct ccatttataa caaccaaaat
                                                                       360
 ccaccttaaa aaatcaaagg ctgggagcgg tggctcatgc ctgtaatccc ggcatttagg
                                                                       420
gaggccaagg tgggttgatc acctgaggtc aggagttcga gaccagcctg accaatatgg
                                                                       480
 tgaaaccccc atctctacta aaaatacaaa aattagcagc ggcgggtgcc tgtaatccca
                                                                       540
gctactcagg aggctgaggc gggagaatcg cttgaacccg ggaggcggag gatgcagtga
                                                                       600
gattgcgccc ctgcactcca gcctgggtga cacagcgaga ctttttcaga aaaaaaaa
                                                                       659
```

```
<210> 5665
<211> 1300
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1301)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (217)...(811)
<223> similar to gi1055044 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5665
cttgaattcc tgacctcaag tgatccaccc gccttggcct cccaaagtgt tgggattaca
                                                                    60
ggagtgagcc acctegeeca gecaacttga cataactttt aaagatggat tgecaagetg
                                                                   120
aggtgaactg cgggcttcat ctggttattc aaacatcatc gcttcctgaa aaaaacaaag
                                                                   180
ttgaattcaa gctaaataaa gacacatcgt cattccccgg tagactttta caacatgacc
                                                                   240
ttgaaagaaa ctactcaagt aggcaaggtg atcatattaa tttggtgagc tcatcattgt
                                                                   300
catcatttcc tattcttcaa cgttcttctg aagagaaaat tctttactca gacaggttga
                                                                   360
gcctagaaag acaaaagctg accgtatgtc ctatcatcaa tggggaagac caccttcgtt
                                                                   420
tgttgaactt tcaacacaat tttataactc ggatacaaaa tatttctaat ctacagaagt
                                                                   480
taatategtt ggatttatat gataaccaga ttgaagaaat tagtgggett tegaetetga
                                                                   540
gatgtetteg tgteettetg ttggggaaaa acagaateaa gaaaatetea aatetqqaqa
                                                                   600
atctaaaaag cttagatgtc ttggatcttc atggaaatca gattaccaaa attgaaaata
                                                                   660
ttaatcattt gtgtgagttg agagttttaa atcttgccag gaacttttta agtcatgttg
                                                                   720
780
tegtgagaga tgtggataat ttgeeetgee teecaacate tettteteag etttaacaat
                                                                   840
atatotagit titgacagig tittecigee čitgeiggae tettetitee etelegggae
                                                                   900
atcaccettt gagggecaat eccatagget teaaggagte agggtaceaa acacactgte
                                                                   960
cttcagaata tgatgcagct gcgccactaa gatatggaag gagaattcac gggaagaagg
                                                                  1020
aaaggcgtat ggcatctgtt ttagcccaaa aaaggaggga agaggaagga gccgggaaag
                                                                  1080
tectaaacca ttettttget taaggagaag aaaagggtta accatttaac cacgtagett
                                                                  1140
cgacagtggg acttgcaaca acgagtagcc aatattgcta caaatgaaga tagaaaagat
                                                                  1200
ttctggactc tcctcaggac cctgttcaga ttgatgggaa ggcaccctct ttggctttcc
                                                                  1260
```

```
<210> 5666
<211> 892
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (845)...(300)
<223> similar to gi4929703 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5666 ttttttttt ttaaaatata tttgctttat tatgtacaca ctatatttac atcacccacc 60 ctgaaaacag caggttetgg etttteegtg aacceecaga tgaatataaa ttggageete 120 tgagaacagt teetteecca gageggggag tgtgeacgtg tgtgtgtaac ettetgatte 180 catgggacct ggccagctcc tctggagcca cacagcacct ccttgcctta caccctggct 240 ccagetteae tggteegggg gaegeeteag eetggggeag etgtgatgta aaccagteae 300 tecaceteca tetteetett etgeaaagaa tegaggaagt ettgecaete tgetgggtaa 360 aagegtttat agaegttgat ettacteega atetgttttg gggtatettg atagtaatte 420 ttctcatcac gggccatggc cttatagtcc tccccgtggt tctctaccat gtagcgtaca 480 tagtcaatga ggtcccaaga cagaqtattt cctttctttt ctggaaggct ggcttctgcc 540 600 tecaggicat teageacata gggetteegg tacaagttet tittaggeete tieetetatg tecacettee atggeettea cetttetett acgggaggge accggeectg ttggggteea 660 cagccaaccc catcteggee aaggttetge egtacegatt taegegtggt eccaeggeat 720 gteggatgtg ggageatteg agteetgege getgeettee gtegageatt eeggtteaga 780 cgctttcggt tgacactgta accaaacttc atgctaccgg gtttatgccc ttggccttgg 840 gcatcgcgct gaccaccgca ccagcagctc aaacacgctg cctctgtctc tc 892

```
<210> 5667
<211> 1366
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1109)...(459)
<223> similar to gi1825695 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5667
cgggttgtgg tcaatatgtt ttttagaaat aaagacggaa aaacatcaca gtgcataata
```

```
tataaggtca atgtcttgtg atacttgatg tatgtatgta tcacacacac acatacacac
                                                                      120
ctacacacaa atacacaaac atacacaatg aattccacag atattggatt gtgatgtaat
                                                                      180
ctttatttct tactctgagc tccagttaga aaagtttgac aatcattgtt atagagctat
                                                                      240
gttcagaaag tggagacttt ctgactcact gtgagctctg ctgtatctat gcgctccctg
                                                                      300
gagagggage aacttgetaa ggtacagtee tggecattgg catggatatt tattgtteca
                                                                      360
catgttggga aaaccatgtg caataaaaat caaacatatg aaacaatggc tgtcattgta
                                                                      420
ccacagtata catigtatet tggtgaaggt tettäaatta eteettägäg Etteetaatt
                                                                      480
cacttcagga aggatttgtt gtgttccgtc tttatgctgt cacttgcaaa cacttttgct
                                                                      540
ttgctagttc ttgtattaga tcttcatata cttgcaaaaa gaggtcctct tcagattttg
                                                                      600
ttccatccag gtacacaact tcccatgtga tgtcctgcat ttcttgtctg tactttagat
                                                                      660
acatgggcca cacatggcca tcaaagtatc ccggagagtc tggaggctga tagaccettg
                                                                      720
tactcctcct ccttttacat tcttcatatg gaatagtcag gaaatagctt ctattccata
                                                                      780
tagtgtcaag gggcttataa ttaaaaagaa gaaaaccttc gatgattaaa atgggaattt
                                                                      840
ceteageact treetggtet grtgatacea cagagtgret tgegettree arecageagg
                                                                      900
aaatggetga catcattttt tecatgttaa gtgetteaag cacategtae tgeaaaaate
                                                                      960
catttttatc tgtctctatc tcagactctg gcttgaagaa atcatcctga gatatgacac
                                                                     1020
tgcaatttgg gaggtgtttc tgcaaattct tagccagtgt tgttttgcca ctqtttqtca
                                                                     1080
caccactgat tecaatgata aatgttttea taattagett tgaaaateae agetteetaa
                                                                     1140
tatttcctgg cgccagttcg agtcctccca aacacagcgg cagaggcgac agccaagcgc
                                                                     1200
gegeetgtae ceagtgegee getaeeegea getegeteee egagaggeee acageeeett
                                                                     1260
tececaeget ceteetgggt tagagggatg ceaggtaggg geggteacea gaggeceett
                                                                     1320
ttetetaete teggegeegg gttecageee eegttgggge acgaaa
                                                                     1366
```

```
<210> 5668
<211> 908
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (548)...(293)
<223> similar to gi2318003 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5668
gegggeeeee gatggetgge etgaetgtee eaggggeaea ggeteeagea ggetgeetgt
                                                                        60
ctgtggtcca ggcttcagga acceceggte ttgggtgtge gggggetggg aagtggetgg
                                                                      120
gggtgcacag teccacacet gteatteact gaacaggeac gtattgacag ettgtggegt
                                                                       180
gtcaggecet gtgcccaaet etgggagtca aggataaeet gacagaetea ggccaettta
                                                                       240
ggaaaacgaa atccacccca accacactta gcgagtcacc ctggccgggc ctgggctgcc
                                                                       300
ctocagtogg toagooggao tggatttoca ogoggoogag coctaogoot occaqaooot
                                                                       360
gagetecagt etgeacagge caggtgtetg gageegggee tggtgacagg catececeag
                                                                       420
gtgggaggag gggctgtcct ggctctgacc tggatatcag atccagagct gagggggagg
                                                                      480
tgcagggtca ggaggggagg ggttctgttc tgagtttccc ctggccaagg ctgcagacaa
                                                                      540
gggacgcaga caatcggcac attgtgagca ggggctgcag gatggaacca gcaagctgct
                                                                      600
gtgctgagcg ccccaaacct gggcctacag gggtgaagac caagccttcc tgcgggggct
                                                                      660
ggagageegt gggeetgete etgetgetge tgetgetggt getggeeget gtggggattg
                                                                      720
tggctggagg gcttcttggc tctgctcagg gccctcccaa gccaaggctg cagacgctgc
                                                                      780
gaatgaccct cocgagoocc cacatgoocc ggoocaacca aaccatcctg gtggacqtqq
                                                                      840
cccggaacgc ggcgaccatc acagtgaccc cacctcagag caaccacagc tgggcggtgc
                                                                      900
```

```
<210> 5669
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (403)...(865)
<223> similar to gi804811 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5669 ggaacacaga gaaaggttca coogggagag atggcotago cacttootta gtgactgttt 60 ggtatatgta ggtccccctg ccattactct ttcagccttc tgcaatctag ttctacttag 120 tcacacactt ctctaagacc actcatacgt aaacactacg tagaggcccc tttttgcctc 180 attitacatt gittagitat cattitgaaa citticitca cataigiaac agigeeggag 240 tttttetget tetetgtgtt tgtteagtaa etettettta ggatacacet aaagatgaga 300 agetteatae ceagtaetee tetteattea eteatatgtt titgggatea gieceitetg .360 ctggctgtgc attggtctaa tggaacagaa tagagtccag aaataaccca acatgtatgt 420 ggacaactgg tttttgacag aggtgcaaag gtcttgaaaa aatgatgctg gaataattgg 480 gcatcagatg caaaattaaa aacaaattga tccatatctt aacactggca aagattaaag 540 tecaaatgga ttatagttee eeaaaaetgt ataattttta aaagacaaca aggaaaaegg 600 gttcagcctt gggttaggaa aagatttett aaatecaaca ccaaaagcac aatecatgaa 660 ggaaaaatcg ataaattgta ctttatcaaa attgagaact tctctttgaa aggtaccata 720 aggagaacaa aaagacaagc tgtagagtgg cagaaaaata tttgcaaaac atttctgata 780 aatgagttgc atctaggtta cataaagaag totcaaaact gaacaaagta aaacccattg 840 ttgacttaat gegetgttte eteetgaget tgetgeetet geeeetgete teteteettt 900 tocattigtt ticaacatig aatocagaat gitottotig agatocaagi cagatcacac 960 caacecteag aactetedaa tagacgaeca tggcaeteaa aagteeacaa tageetteaa 1020 tgetgggeaa aacatgaage acceetttte teeettetet gacceeatea eetetgtgtt 1080 caccotigete etgeogteet ecotigeotee aaaacaigte aggeettegt geetttigeae 1140 ttactatttg caatacccaa atgttettea ggetetttag eetetteatt tettteetga 1200 agtgtcattc tcactgaggg cttatctaaa agctggcagc tactgggggc attcctgtct 1260 catetecetg ctgtattttg taacteeegg getetetttt gtaettttaa acatactata 1320 tggtttacct ttgttgttta tatttgcatg ttgtttccca cttqaatqta aqctccaaaq 1380 attitattit titaaaciga attattacig tattoocaga acaattooci ggcaaatatt 1440 tggtactcaa tagtaatgct aagttagtaa ataaatgatg aatttagaat caaaataacg 1500 tgtctatggc caaaataaaa cotgaaatco otgtcotatt ttcccagagg taactqctqt 1560 taatagttta gttgtgtgct tecagacata eetteacaga ateatttate acaataaagg 1620 tgtcatacta tgcaaaaaaa aa 1642

<210> 5670 <211> 1249

<212> DNA

```
<220>
<221> misc_feature
<222> (497)...(333)
<223> similar to gi347455 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5670 cccacgcgtc cggtgtttga ccaggtcaga actcttgttc tatgcgaatg tgctcacgca 60 gacagaageg gaggggetee gtegetetge ceteaegeeg etgaaeegeg agggteteee 120 geteeteagg ettgeggete ggeegegaag tgtgteaggt gtgeateetg ggtgeteett 180 tgtgctctgt cctacggcga cacaggcggc gtggggttag acaggtaccg gtcagactac 240 ggtgacacag gcggcgtgcg gttagacagg taccggtcag attacggtgg cacaggcggc 300 gtggggttag acaggtaccg gtcagattac ggtgacacag gcggcgtggg gttagacagg 360 taccggtcag attacggtgg cacaggctgc gtggggttag acaggtaccg gtcagattac 420 ggtggcacag gcggcgtggg gttagacagg tactggtcag atgcacgggc tccctaaacc 480 cctgctgtgg cttcggcagt aaagacagga cgcacccatg tcacaagagg agcacaggca 540 ggggtgttgg tgttggggca gccctcaggg tctccagacc ccagccccac tcacacagca 600 gcctaggaag gaagggcaga gtcccaggtg tcagctggtg ggtctcccag gagctgcccc 660 tecetggaag teacaggaca ggaatgacag atcagggaac tgcaggaage tgccacetet 720 ggggtcagaa tatgcccagc ctgcgggggc tctctatcgg ggtcttcgag agccagacag 780 cctgccttgt gctgcatacc tggctttgct ctgtgcagaa cccagcacac gtgattttgt 840 gtgacatgcc agcagcctgg ctcccaggac aggaggcctg ccctggggga ggggctgcag 900 gaggagggg ggcaggcacc catgagtctg tccagccttg tcacagatgc atcgcccaqc 960 ctgcggtcct gatttcagct cacctcagag taaatcagaa taaactgcac ccagactttc 1020 acgaatgcat gttgacgctt tcagttcacc cctttctttg ctaactttct tcctattttc 1080 ttctaatgcg agagettatt aattecatat ttateatttt gaataaettt teteettttt 1140 aggttacaaa agtactttca ctcttagtaa aatgtattta ctattttagt aacaaaaata 1200 tacttgccta atcatgttta aaatatagtg atgtgaaaaa ttctcgtgc 1249

```
<210> 5671
<211> 2042
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (513)...(1360)

<223> similar to gi4587223 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5671
ctctgttggg aacttttctc atggagaaag ctaccatcgc tttgaagagg tattcttcat fggtatccca ggcatatgct ttatctccca gagctgttct gataataagt ctcactttaa aagcattttc tgcacctcga acgtgggggc gcggtcctta cgtgtgggcg cggtccttac gtgtgggcgt gccttgttgc tctgaggggc gtaacaaaga tggtggagca ggcggagggc 240
```

```
agaggcgtcg gcaggttagc gtgcaggcgc gtggcagcga caggagatgt gtagccagag
                                                                      300
cgcagagcag gtgtggactc cggcgctggg gaagcgtggc cagggcgaga tttcagcctq
                                                                      360
ggtcggggac agaatgggga ctgatagggg cgtaacctgg aatgacgaaa tgacgtttgc
                                                                      420
tgcgtaggga cgtggctaaa cgtgaggggg cgtggccaag atggccgcgt gtgggatcct
                                                                      480
cgggtaccgg gagcgaacqa ggaggttctg gctcagtgca tccactctqq qaqaqcqtqq
                                                                      540
acctggttcc tgggggcgat cgacagtcac ccatcaacat tcggtggagg gacagtgttt
                                                                      600
atgatecegg ettaaaacea etgaeeatet ettatgaeee ageeacetge etecaegtet
                                                                      660
ggaataatgg gtactctttc ctcgtggaat ttgaagattc tacagataaa tcagctgcac
                                                                      720
ttagtgcatt ggaacgcagt caaatttgaa aactttgagg atgcagcact ggaagaaaat
                                                                      780
ggtttggctg tgataggagt atttttaaag gaaaattctc agtctccctt gaagaagtga
                                                                      840
agecteette tttatgeact ggecactgte taatacetee cageaatact cagaggagae
                                                                      900
tacctgctgg aacctcacta gaattgagag atcaaatggt tttggctgtt ttcccactgg
                                                                      960
agaatataaa aaatacacag ttaattttag aaacaaaggc tgggcatgat tccatcctaa
                                                                     1020
geageaatte tteaggtage tgeecagaag ggeetggage teetetqqae caetqetqat
                                                                     1080
ctocagatac tecetgagaa cegteacete ggegtecaat teetgagtgg titteactae
                                                                     1140
taaataatga ctcagtgacc cagtctcttg gccaggacgc tgttatggaa tttgggtcgt
                                                                     1200
ttggcacttc ctgcctggtg cccacctgtc tagattactg gacccaagta ggtccagtat
                                                                     1260
ctccctggtc cagccctgtc ttgagtccat cacctttatc attaagaagc agccagtaga
                                                                     1320
ggttgatgat gatcaggtac gttctctcca caattttcat ctaaggaaat cctcgtctcc
                                                                     1380
ccttttaaaa caaggctggg ctcaaacttg taggatccag ttttaacatc ttgtaatgct
                                                                     1440
tatacatttt tattgaagtg taccaacgtc ttatctcagt ttggacatga atttaaagat
                                                                     1500
atttccaatt agctagagag aagagttaaa acatagaaga acataagctt tttacatcta
                                                                     1560
tatttgacag tgacatatgt ttttattata catgcattgt gtagattctc tatgaaaatt
                                                                     1620
aagacccttt taaataaaaa aacgaaggct ggaaatgggt gtattcaaaa ccctttaaaa
                                                                     1680
tccttaaggg agttttgcta tagaatctca ggataaagac agactccgac aatattcatc
                                                                     1740
cagaaatttt catgtaagtc agttgtttga aacttgggat ttatttttct cttagaaact
                                                                     1800
aagtotaagt ggtggttact acatoagoac acaaaatoot gtttaattoa taaactaaac
                                                                     1860
tgtaataata, actgcgttta cttgttcata ttgggttttt attgactaaa agcttccagc.
                                                                     1920
ctetttttea tgeagecagg ataacagtga taccaaaace tatcaaagat tagaccatee
                                                                     1980
tacccccaaa atataacaat aggccaatat ctctaaaaaa tatgtaacaa cagaaaaaaa
                                                                     2040
                                                                     2042
```

```
<210> 5672
<211> 2937
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2761)...(505)

<223> similar to gi3135968 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5672
tttttttta ttttataatt cttttatta ggaaccagtt acctaaacaa tgtaaatgca 60
ttagaccagg agcatactag atccccgatc tagttactcg aagcacaat tctattggca 120
aaacatgcat aaacatacac attctagatg caacacagca aaatgctgat gtatagtaaa 180
cccccattca agaaaatatt gtaaatatac aaaactgatt ataaaacttc ccaaactacc 240
tttgaaataa tctactccaa agccttcatt ccataaagga aactaaagct taaaacagta 300
ggagttttct aatgtcacag agtgggcttt aataacaatt gggattagtt cagcccaatg 360
```

```
gtactttcca ttccataaca tgatagtgaa aatttaaaag atttcaaggc agtttctaaa
                                                                       420
 tecaetetga ttetteagta ettaacaaaa ggacaaaeta aagtaaatat eteeeetaaa
                                                                       480
 tttatgatgt tectagaatt gteatatgee aggatgeagt etetgatgtt tgttgagage
                                                                       540
 agagegatat etgaaggatt ttecacaate attacateca aaaggettet eteetgaatg
                                                                       600
 aattetetgg tgetgaatga gatatgtget etggetaaaa gtettteeca catteattae
                                                                       660
 atttatatqq tttttctcca qtatqaattc tttqatqttq aqtcaqatqa qtqctccqqc
                                                                       720
 taaaggettt gteacattea ttgeaettat agggettete eecagtgtga attegttgat
                                                                       780
 gctgagttag atgggagctc tggctaaagg tcttttcaca tttattacac tggtagggtt
                                                                       840
 tttcttctgt gtgagttttt tgatgttgag caagagatga acaatgtcga aaggctttac
                                                                       900
 cacactcage acactcataa ggcttggctc ctgtatgaat tctcttatgc tgtgtaaggt
                                                                       960
 gtatgttetg gttgaatget eteccacaet cattacaett gtaaggtegt tetecagtat
                                                                      1020
 ggatetteet atgetgaata agggatgaac cataactgaa ggtttteeca catteatgae
                                                                      1080
 actgataggg tttctctcca gtatgaattc tttcatgctt agcaagagat gaactccgaa
                                                                      1140
 taaaagettt cecacattet ttacatteat aagetttete ttgagtatga gttttetgat
                                                                      1200
gctgattaag gtttgagaga taactgaaag cctttccaca ttcactgcat tcaaagggct
                                                                      1260
 tttctctcgt gtgaattctc cgatgttgag taagggatga gcagtaactg aaggcctttc
                                                                      1320
cacattcatt gcatttgtaa ggtttttctc cagtatgaat tttcaggtgt tgagcaaggg
                                                                      1380
atgaccagta actaaaagat tttccacatt ctgcacaatc atagggtttc tccccagtat
                                                                      1440
gagttttttg atgctgagtg aggtttgagt gctggctgaa ggctttccca cattcattgc
                                                                      1500
attegtacgg tttttcccca gtatgaatca tatgatgacg gataaaagtt gagggcccgt
                                                                      1560
 tgaaggcctt tccacattca ttacatttat aggttttttc tccagtatga attttttqat
                                                                      1620
gttgagtaag gtgtgtgctc ctggtgaagg ttttatcaca ttcatcacat ttaaaaggtt
                                                                      1680
tttctcccgt atgaattttc tgatgttcca taaagtggcc tctctggcta aaggcttttc
                                                                      1740
cacactcatt acaagtgtat ggcttctcgc cagtatgaat tctctgatgc tgaacaagat
                                                                      1800
gggtcctctg actaaaggct ttcccacatt catcacattt atatggtttt tctccagtat
                                                                      1860
gaattetttg atgttgagta agagatggae ceteaatgaa geetttteea eactgateae
                                                                      1920
atttatatgg tttatctcca gtatgaattc tttgatggtt tataäggttt tcactccggc
                                                                      1980
 tgaaggettt ttecacaate aattacattt gtagggtttt tetecagtat gtgttetetg
                                                                      2040
atggcgaata agagctgaac aataactaaa ggctttccca cattcattgc acttacaaga
                                                                      2100
tttctctttt ttaactgggt ttgaattctg tttgatgett cttttaqtaq aggtctcttc
                                                                      2160
tggagatggt tcttgtgtta caaggtttga actcacattg acacttttcc caaattcatt
                                                                      2220
atttacaggg cctttttccc aactgggtat tgtcttttcg gttaccttta tttcctttgg
                                                                      2280
cagtgtctgt tggtttgcct gctgtctctc taaactgcct tcatattccc aactttctag
                                                                      2340
caagttggaa ctccaagaat catctctttt gtgtttttcc actattacct ctggaqataq
                                                                      2400
ctettettea gaaatgteag getetgggge tgacacacta tttteaagte ttgteteeca
                                                                      2460
gtctgcacag gtacctactg gaatgcttgg ctccatgatc catggctctg tcccttgctc
                                                                      2520
taactgggaa atcacatcag gtttagaaac ttggagteet atagagacca ggtgtgtata
                                                                      2580
attiticcaat gicacateee tgaacaaate tetetggeca gggtecaget gittecatte
                                                                      2640
ttcctgggta aagtccacta tcacatcctt gaaagtcacc gattcctgaa aactggctga
                                                                      2700
tgagagtaga ttatgtcccc cttggagaag ggtggagtct ggagaggaca gatcttccat
                                                                      2760
etcaggaget catecegtte etctggaact tgaacaceag ggttegecag geagegttee
                                                                      2820
ttcagctggt atctcggtct aggactcaga tgtctaactc cccttgcagg gaatctgcaa
                                                                      2880
cacgctgagg ttgtctaccc tgttgcagag cgttaaagct ggaaggtgga caagcaa
```

```
<210> 5673
<211> 3883
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3848)...(422)
<223> similar to gi396815 in the genepept database release 114,
```

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                                                                       60
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ggagtagctg aacagggcat gttagtggtg tgagtgctgg cttaagcgaa ggagctggag
                                                                      120
tgggggtttg tgttggggga gcagtgggat gggaaacaca cctgtggggc agctgaacta
                                                                      180
gaaagaagga tgcccaggat agctatgaga cacctacaaa gcatgggaac ccagttcccc
                                                                      240
                                                                      300
taagcccacc ccatccccag atcccttttt ttctccctta agttaaaaaa attcctttga
.ggcagettaa gtcaagagge etgtaagggg tcaagaetgg gtcacaggtt taggacagca
                                                                      360
gagttttget ceeggeeage agageeaagg ttetgggetg ggatgggeag etteagggee
                                                                      420
ttcctcagct gtgggcattc aattgcccgc gtaagtgaaa gtttttcaaa cagcgacatg
                                                                      480
gtttcacata gggccttcct gggcttccaa gcatgcgggc ctagctgtta gcgcaatctg
                                                                      540
ggcaaagggg ggttcgcttc atagggacgg tcccgccagc actgacgcat cagctcgtac
                                                                      600
acttcatcgt cacagtttcg aggctgctcc atgcggtagc cctggggcag cttttcatag
                                                                      660
                                                                      720
ageteggeae aggteatgee acagtagggt gtacetecaa ggeteactat eteceaaaga
aggactecaa aggaccagac atcactettg gtggtataga cactgtagtt cagggactca
                                                                      780
atggccatcc agcgcacagg gagacgcccc atcgtcttct tcacataaac etectctccc
                                                                      840
cgagaaaggc cgaagtctgc aatcttggag gctaggttct ctccgaccag cacattccgg
                                                                      900
geagecaggt ccctgtggat gaactgette teactcaggt actgeatgee attggeegea
                                                                      960
tcactggcga aaacgcagca gctgccggga gcctaagggt agaggctgtc ccatgctctc
                                                                     1020
gagcaaaagc tgggtcagtc tctaggaccc ggcttttccg cagaaaatct agcaggttcc
                                                                     1080
cgtagggggc atattcaata gcgatataca agtaacctcg gttcttacag gcccccagga
                                                                     1140
ggttgatgat gitggggtga tgccccaatt tgcacagaac ttccagttct cccgcaaagt
                                                                     1200
cacgatggtc attttcagag gcatactett teageatttt gatggetgeg ttcatettea
                                                                     1260
gecegteett ettgateatg geceggatga cetggeegaa gtteecetee eegatgaggt
                                                                     1320
cctcaaaggt gatgtcctcc cactctagca ctgggtagct caggggctcg ggctgcagtt
                                                                     1380
ttggccgccg ggtaagtgtc aaggtccctg agctgaactg caggatggtc tcctcgcccq
                                                                     1440
agcetgaetg gtaggtgaag gtgegtetee gatgeaggea gettetgegg atgeaeaeea
                                                                     1500
gggttaaaag ggcggccagg atggtgaggc aggtggcaga cacggagccc accaccgcca
                                                                     1560
ggatcagetg etgatecagg cectetteag etgecegget etettggaet gggeceteag
                                                                     1620
cetgeageee gttgeeeagg gtggaetett ctaetgtgtt geteeagtee eegageeeet
                                                                     1680
gaatgetgge eegcatgegg aagaggtage gegtgetgge gttgaggeea eggatgatgg
                                                                     1740
tgettgtete etcaggeetg tecaegteta tecaeagtgg gteteetgea ecceeageea
                                                                     1800
cetgeacete cacaacgtae tiggatatig geocaggeag agenteeggg tgettecatg
                                                                     1860
tcagctggat ctcggagtct gagagggcct gggcgtggag gtgtcggggg gctggaggcc
                                                                     1920
cactgggggg cagaagcacg tgtgcagggg gcgaggccgg gcccaggagg gtgcagtggt
                                                                     1980
agagetgeae atceagetgg tagtgggtge caggegtgag tecegteagg agggeagtge
                                                                     2040
gggcctgggg ggatgagacg ttctcccgcc gctcctgccc ccgtgtcccg tcccacaggc
                                                                     2100
gcagcaggaa accgtcgccc accagtggcc cgggcaccaa gggcaaggac cagctcactc
                                                                     2160
gcagccggtc agtgccttcc acatgccagc cctccaacca cggctgcaac aaaggctcag
                                                                     2220
gacagtetgt ggtcatgagg gtgggaggec eccaggeece eteteetet teecetggee
                                                                     2280
ggctcagctg cacacgaaca ctgtatcctg tctttggcct caggttcatt aacgtcacgt
                                                                     2340
teteactggg gtecaccaca atggtegace agtecatggt actgtectgg ggeeggtagt
                                                                     2400
gcaggcggac agtggagatg ggtccatccc cagagaacga gaccagcggg gagaccacaa
                                                                     2460
gctggcggct ctgcttggtc aggagccgag gtgcagccag gggcacgggg ggcactttca
                                                                     2520
cattgacett gaagegeegg etgtettgge egecagatgt ggacacaegg cacteceaga
                                                                     2580
acceaetgte egeaagaace aageggggea cetegaacte agetgtggte ttetetgget
                                                                     2640
ccacaatggc cttggtggac aggagcacag tgccgtctgg cttgcgtagc tctatgctgc
                                                                     2700
cccgcacggg gaaggggttc cctgcagctg cacagttgat ccggggcatc gtctctaagt
                                                                     2760
tgaactccag ttctgaggcc atgttgagga tctgggggat ccggtctgac ttctcacagt
                                                                     2820
geacteeatg ceacceagag gggcagacac aaccactgaa ceggteacaa gtgecaccat
                                                                     2880
tetgacactg geactggagt eggeaateag eeccaaaatg accaggggea caagettett
                                                                     2940
ggcactggct teeteteeag ceagateeac aagageagee ataggggtet gggaggeaga
                                                                     3000
aggtgaggcc ccggcagcct gatatgcctg ggcactgctc ctggcagctc tgcccaaaac
                                                                     3060
```

```
ggccctctct gcaggcctgt tcacagcggg tgccagtgaa gccagggggg catacacatt
                                                                     3120
egeogteatg gtegtggeag acacetecat gtaggeaace tgggeactee ttggtacage
                                                                     3180
etggeeccca gegeecagee ceacaacece geacgatgag cegaaagaag gegetgeeca
                                                                     3240
gggggctggc ttccaggtaa gtggcactgt agatgccgct cgatggtggc tgcacatttg
                                                                     3300
ggagetgeag caggaacege ceatectggg etteatgeca gtecagggtg tagaagtagg
                                                                     3360
atcogttgct cttccagatc acgtctgtct gcttctcctt gtgcacacgt gcagaaagta
                                                                     3420
cagcggtgtc acctttgttc acagtgtgtg tgaccttgtc tggaagcagg tgggctccag
                                                                     3480
ggctgttgtg cacgtagatg acgcgcgtgc gccgcgcccc agcaccgccc acgcaggaga
                                                                     3540
agacgcccac gaggtccgag ggcttggaga agccgcgaag cgtgacctgg tgcgaaccgt
                                                                     3600
tgcgcgccag gcgcaggggt ggcccgggcg gggtgcgcac gatacggtcg tccttctcca
                                                                     3660
geageagggg egggeeecag gegteegage eeeteeeege eeeggeetee eeagaeaege
                                                                     3720
aagtcaggaa gaagcgctgg gggtccgtga gccgcaggtt ggccagcagc gtcaggtcca.
                                                                     3780
cegeegegee cacatgagaa gecaagaaga ggatggggag caagaaaggg ggcaceegee
                                                                     3840
agaccatact ccagaggeeg acceaggeea geeaggaega geg
                                                                     3883
```

```
<210> 5674
<211> 4588
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (166)...(2962)
<223> similar to gi4240287 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5674
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cgcactcccc getteccget ccccgcgctc ctccgcccgg gtccgccagc cgaggccgct
                                                                      120
cccgagcgtc ggaagatgcc ggccgtgtcc aagggggacg ggatgcgggg cctggcggtc
                                                                      180
ttcatctcgg atatccgcaa ctgtaaaagt aaagaagcag aaataaaaag gataaacaag
                                                                      240
gaactggcaa atatcagatc aaaatttaaa ggtgacaagg ctcttgatgg ctatagtaaa
                                                                      300
aaaaagtacg tctgcaagtt gctcttcatc tttctccttg gtcatgacat tgactttgga
                                                                      360
cacatggagg ctgtgaacct gctgagttca aacagataca cggaaaagca gatcggctac
                                                                      420
cttttcatct ctgtgttggt gaactcaaac agtgagctga tccgcctgat caacaacgcc
                                                                      480
atcaagaatg acctggccag ccgcaacccc accttcatgg gcctggccct gcactgcatc
                                                                      540
gccagcgtgg gcagccggga gatggccgag gccttcgccg gggagatccc taaggtcctc
                                                                      600
gtagccggag acactatgga cagcgtgaag cagagcgcgg ccctgtgctt gctgcgcctg
                                                                      660
tacaggacgt cccccgatct tgtccccatg ggcgactgga catcccgagt ggtgcacctg
                                                                      720
ctcaatgacc agcacttggg tgtggtaact gcagccacaa gtctgatcac cactttagca
                                                                      780
cagaagaacc cagaagagtt taaaacctcc gtgtctctgg ctgtctctag gctaagcaag
                                                                      840
aatcgtgacg tctgcatcca cagatctcca ggattacact tactaatttt gtcccggctt
                                                                      900
cctgggcttg tctgtcaaac tgctgagact gctgcagtgc tacccacccc cagaccctgc
                                                                      960
agtgcgaggc cgcctgactg agtgcctgga gaccatcctg aacaaagccc aagaaccgcc
                                                                     1020
caagtcgaag aaggtccagc actccaacgc gaagaatgcc gtgctcttcg aggccatcag
                                                                     1080
cttaatcatt caccatgaca gtgagccgaa cctgctcgtc cgtgcctgca accagttggg
                                                                     1140
ccagtttctg cagcaccgeg agaccaacct gegetacetg geeetggaga geatgtgeac
                                                                     1200
gctggccagc tctgagttct cccatgaggc tgtcaagacg cacatcgaga cggtcatcaa
                                                                     1260
cgccctgaag actgagcggg acgtgagcgt gcggcagcgg gccgtggacc tcctctacgc
                                                                     1320
catgtgcgac cgcagcaacg ccccacagat cgtggccgag atgctgagct atctggagac
                                                                     1380
```

```
agetgaetae tecateegag aagagattgt getgaaggte geeateetgg etgagaagta
                                                                    1440
cgcggtggac tacacctggg tatgtggata ccatcttgaa cttgatccga attgctggtg
                                                                    1500
attacgtgag tgaagaggtg tggtaccgag tcattcagat cgtcatcaac cgggacgacg
                                                                    1560
tgcagggcta cgcggccaag actgtgttcg aggctcttca ggctcccgcg tgccacgaga
                                                                    1620
acctggtcaa agtgggcggc tacatcctgg gggagtttgg aaacttgata gctggagacc
                                                                    1680
cgagatccag cccgctgatc cagttccacc tgctgcactc caagttccac ctgtgcagcg
                                                                    1740
tececaceeg egegetgete etgtecacet acateaagtt egtgaacete tteceggagg
                                                                    1800
tgaagcccac catccaggac gtgctgcgca gcgacagcca gctcaggaac gcagacgtgg
                                                                    1860
agetgeagea gegtgetgtg gagtacetge ggeteageac egtggeeage acegaeatte
                                                                    1920
tggcgaccgt gctggaggag atgcccccat tcccggagcg ggagtcctcc atcttgccaa
                                                                    1980
ageteaagaa gaagaaggge eecageacgg tgacagacet ggaggacace aagegggaca
                                                                    2040
ggagtgtgga cgtgaacggg ggtcctgagc ctgccccagc cagtaccagc gccgtgtcta
                                                                    2100
egecttetee gteggeagae etgetgggte teggggetge ecceetgee eccqqqqee
                                                                    2160
ecceacete eteeggegge agegggetge tegtggaegt gtteteagae teggeetetg
                                                                    2220
tggtcgcgcc tctcgctcct ggctccgaag acaactttgc caggtttgtt tgtaaaaaca
                                                                    2280
atggtgtgtt gtttgaaaac cagctgcttc aaattggact taagtctgaa tttcggcaga
                                                                    2340
atttaggtcg gatgtttatc ttttatggta ataagacctc cacgcagttc ctaaacttta
                                                                    2400
ececaacact aatetyttea gaegacette ageetaacet gaacetycag accaageeeg
                                                                    2460
tggacccgac cgtggagggg ggcgcgcagg tgcagcaggt ggtcaacata gagtgcgtgt
                                                                    2520
2580
acgtgtctgt gcagctgccc atcactctca acaaattctt ccagccgaca gaaatggctt
                                                                    2640
ctcaggattt ctttcaacgt tggaagcagt tgagcaatcc acagcaggaa gtgcagaaca
                                                                    2700
tetteaaage aaageaceea atggacaeag aagteaceaa ageeaagate attggatttg
                                                                    2760
gttctgcact tcttgaagaa gttgatccta atcctgcgaa tttcgtggga gctggaatca
                                                                    2820
tecacaegaa aaccaeceag attggatgee tgetgegett ggageegaac etgeaageee
                                                                    2880
agatgtaccg geteaegetg egeacaagta aggaageegt tteteaqaqa ttatqtqaat
                                                                    2940
tgctctcage geagttttag tectgaggat ggaagaccag getegtgtgt ettgtgttgt
                                                                    3000
cttcgtctgt gccgtttgtc ttcgtggcca tcctgcagat gagcaccgtg tccagtgcca
                                                                    3060
cagcacaagg cgcctccccg ccccgccgcc ccacacctct cccctttggg ctggacggga
                                                                    3120
acacacgtgt gtggctcagg aggaaaagct cagcctggac tgtggcagcc acggcagaag
                                                                    3180
gtggatcttg ggatcaattt ttataaaaat cgagacagtt ctgtggttaa atctacaaat
                                                                    3240
taaagggaaa ttagaagttg gcgtgaacgt ggcgtttgtg ggagtgtcac tgagatggcc / 3300
cgtgctgccg cccaccccgc ctcggagcct ctgggagcag cagtgccact gtgcatggcg
                                                                    3360
tgggctgagc cttggtgtgt ggccgtcctg gtggctgcac acctggcgtc gtcctgggcc
                                                                    3420
cttgggagga gcacagctga ccctggtttt gctgcagtcc cagctggact gttttcccag
                                                                    3480
gcaggatttt aatctagaat ttagaaacat ttgtatttgt aatgacttct ggcaaaagca
                                                                    3540
cgtgtcctgg ccggatgtaa ctgttctcct ttcccagctc ctgtttgtga agggcgtctg
                                                                    3600
ttatgeteet geagtegeeg aggeettgga tgtgeageea ggggaggage gteetgeegg
                                                                    3660
ccccgcaggg cccccaggac tccagggtaa agtgtgggcc ggtggcgcaa gactcagagg
                                                                    3720
tgtgctcgtc tctttcctgt cagagtgggc gtccccaggc cacggtgcag gcctgagtcc
                                                                    3780
ttccaccggc cccgtccagt cgtccctgga ggggctgtgg aggaaggacg cctctgtgtg
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gtcaggaagt gaaggggcca ttggccgcat gccatgtgcc acctgcggct tgtgtctcac
                                                                    3900
ctgtcatctg gactcagcac ccaggctgca cgtctgacac ctgagaggcg agagagtggg
                                                                    3960
geoggeotag gagecaagge tggggeettg egetetgtee eeaggatggt ggeettgttt
                                                                    4020
gtoctaaaca cacccagcac aggittotggo ttoctgacat gotgtggagg cagggagggt
                                                                    4080
gggtggccac atgtgcttga gggttttcac cctggccctc agttgcctgc tgtgcgggtc
                                                                    4140
cetggggcag etgeaggge teatggace atcagggtet ceacagetee cetgeagtgt
                                                                   4200
gtgcacccca caatgtctgc ggctcttctt ccggcgtgtc gggctttgat cacagcatag
                                                                   4260
ccacgtcagt ggcgtgcgcc tctcgcacag gccattctgg gtctggtggt gccaggtgcc
                                                                   4320
gtgacacgec gtgctgggct tgtgctgcag ctgggtggtg tggccctcat tctcatgttc
                                                                   4380
cagetgetgg geagtgetet geetgtgtge tgegeetgea ggetgegtgt getgeegtgg
                                                                   4440
atctcctgca tcccttgacc cctcccgcca tcagaggaaa ggctgctccc cgaggcaccg
                                                                   4500
cttgccctgt gcggcgctgc agaggggccc tcagtgtggc actcctcgtc aaagaa'aaat
                                                                   4560
aaaggctaga actgcaaaaa aaaaaaaa
                                                                   4588
```

```
<210> 5675
<211> 1838
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (903)...(1817)
<223> similar to gi57920 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5675
gtaaccttac agtteggate tettagaacc cacaagcagg taggegateg etgetteate
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acacttcaca gggagtcctg gatctttcct gtccgtaacc catggacgcc atgattcagt
                                                                      120
atggcggagg tccggggctt aagttcctgt tcatgcttcc taatcattca tggatccatc
                                                                      180
acaatgtgct ctgaagggcc tctcttgctg ggattgagaa ggatacattt tttgagcagg
                                                                      240
tttttatact caatggacat gtagaaggga atatattcta ctcagttccc ctcctgcagc
                                                                      300
                                                                      360
teettgaaat tetgteeate aaaaacaggg atetgetgae cagaggtgae tgeeacagaa
ggtatccagt ttgtaaaagc tgaattttgt gctgaagcca gaatttgcaa tcttgatgtt
                                                                      420
tgtgttaaca tccaacageg tgttttctgc ctttaaatct ctgtggacaa taegtttctg
                                                                      480
gtgacagett geacageaaa eaettttiggt agaatttiget teagteettt titttettte
                                                                      540
ctgctgccat gagcaggtat tcacaaactt ctcctcctgg ctagtgtgct tcatgacaaa
                                                                      600
gcaaagagat teeteaatat egateacage aaatgtttea etatgttggg gtgateegag
                                                                      660
cetteatggt tectactttg tggatggtgt etggaggaga tetgetgagt eteateaatg
                                                                      720
                                                                      780
aacttcacag ctgctgcttt cccagttaag aggtcccagg ccaaccttac cttagccagg
ttgcccttga cgatggtctc aaggatccta gctgccagta agggtccctt ctcagcagag
                                                                      840
atggctgaga ggccctgtgg catgtgagac ttactgctgg gcttggagtc aaggtgtccc
                                                                      900
aggtcagctt aattteggga aaaactggta agacgettgg tteaaateae ttgaaaagaa
                                                                      960
aatcacttgc atagttcacc tgaagaatgg atctctataa tggaattaaa gcacaatgct
                                                                     1020
ggacaaaaag taagaaaaag caacaaactg aaaggaaaaa ttgagtaaaa agaataaaga
                                                                     1080
actagaactg gcaacctcag ccaagccagg gaattacata catcttggaa ttccaaagca
                                                                     1140
atgetteett atgagggeat aggaagaaat aaatetaata acaaggetgg gattaattea
                                                                     1200
cgtggttttc tcacattttg gtctcaagaa ctttttactc taaaactaat tattgaggac
                                                                     1260
cccaaagagc tttttatgtg ggttatagtt atcagtattt actttattgg aaattaaaac
                                                                     1320
ctgtaggatg tttcagtggt cttttctagt ttgaagggtt taataatttt tggcttttaa
                                                                     1380
agageceata ateaattaaa atattttatt tteetttaaa ttgtaaatga ttggtgteat
                                                                     1440
aatgatgeta caacttaact ggcattacaa tactatacaa ataegtteta ttgtataagt
                                                                     1500
cacaataagg tacattatta actotataac atttagggga agatagctgt tatcatatta
                                                                     1560
tttaaagttt tgcctagttt ctttgtagta gacttatctt ttccaggagc cagagaaccc
                                                                     1620
gctatatcag tttcagtatc tttaaatgta gagattgcag ctgtgtgttg agaaagcacg
                                                                     1680
tttcacttag catgggatgg ggacttcgag gtactggata tgtcactggc acctcagggg
                                                                     1740
aggaaaccaa gatgccccta tatgatttta aacatggttt attaaagcgt gatacagaaa
                                                                     1800
agtgcacaaa ttgtccacct acagcttggt gactgttc
                                                                     1838
```

```
<210> 5676
<211> 1020
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (220)...(767)
<223> similar to gill74092 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
<400> 5676
```

cegeaaätat tgaatgettt teecetaaca caaggataac caettteate aetteteate 60 actggctaga gaacctagcc agtgtagtaa gggaagaaaa agagataaaa aacatacata 120 ttgtaaagaa agaggtaaaa ctgtttaatg catagctcac ataattagtt ttgtagaaaa 180 teetgtggaa tetacaaaaa tgeteatgaa aettgtgagt ttagaaacat cacaggatae 240 aagatcaata tacagaaatc aattgtttta tatactggtg ataacaaaaa ttaaaataat 300 acagtacaat ttaccacaca tcaaaatatg aaatatttag qqatagattt aacaaaatca 360 agacctgttc actgaaaact ataaaacttt gctatcagaa attaaataag acctgaataa 420 atagaaagat attittigit cattgetigg gaaatteaat attgitaaga tgetagitet 480 ccccaaattg ctctataaat tctatgcaat gtcaaccaaa atctctgctt ttaaaaaaaat 540 tgacaaactg attctaaaat tcctataaat gccaaaagcc tagaataatg aaagcagttt 600 tgaaaaagaa ggagaagttg gacaagtaca aattttgaga ettattataa agetaaaata 660 atccagaaaa tgtggtattg acataggata catatataga tcaatggaac agagtagaga 720 gaccaaaaat agattcaatg tatagggtga attgattttt gacaaaagtg gcaaaatact 780 ttaatgggga ggatggtagt cttttcaaca agtgatgcta gaacattgag ttctagcacc 840 agtagaacta gaatgtggaa ääägtgaact ttgggcatat catgttgaaa aataactcaa 900 aatggatcac agacctaagc acaagaactg aaaatataaa acctccagaa gaaaacatag 960 gagaaaatee ttgcaaccat ggaatgagca aagattttte agggeeecca gtgcatgaaa 1020

```
<210> 5677
<211> 2856
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2619)...(2456)
<223> similar to gill10587 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5677
tacgagtaca getteegead agageagage geageegeea ggeteeegee cageeceaee
                                                                       60
aggtgtcage agatecegea gteetgagga gecageggee acetgegggg agaceaeege
                                                                      120
egeceagaet aetgaeggea ggggetgetg ecceegeete eteetgeege eteegeeage
                                                                      180
cetecetece acaetycece ageaggetg geoeggagae tgggcageta agtgggegea
                                                                      240
teetgtette agetggeetg aetgaeaece eggeeteeet ggggaeattg tteataacea
                                                                      300
tgactaatet gtgtgtgctg tagtgaccag cggctcctaa cgtgtctgtg tgatgaccag
                                                                      360
ttgtcctcca aaaacctcac tcaccacgga gtcaccctga gggccccggg cagttgccct
                                                                      420
ggeegeeeag tgaegeeeae eggeteeete egeteeetee tgteaeetae cagggeagae
                                                                      480
cccactaage egitgagiet etteetggaa gaccetgagg geeggeaget tigeetagga
                                                                      540
```

```
etetecaggg tegetgatee teeceggeee agggetgeea ggaacaagtt cetetetgea
                                                                    600
ggateteaca geageeetga gaagaeatgg gaggaagaag eeagtggeee tggggtggae
                                                                    660
cetgecettt tggacatece atggacttgt cacccagteg cetggaagte ggggagcage
                                                                    720
accectgece ceggtggagg ggttgttget ttetggggag gaggaeggtt gaeggeeetq
                                                                    780
ettggateca ccaccaggac getgtgeteg gecatggege geeteececa agggeteate
                                                                    840
tgtgcaacaa ccacatgcca acaatagctc caggtgcctc agccccgtgc cctgacccgg
                                                                   - 900
ggaccacagg gacaccctct gagacgtgct ggccccagga ggatacaggc acacgggcac
                                                                    960
ccagcccctc tcagagccag gcgtgtcttg acggtatctg ctgacgggaa caagtcattc
                                                                   1020
tgaaaggtcc ctctgaccca ggtcaccaaa tttgggccag aactggcact tccgagtgcc
                                                                   1080
cactggtgct ggcgtcctca aagtgccggg cgccaagttc agccccaggt gcgtttgcct
                                                                   1140
aggeagtggt ggetgeeate ceteggggee eaggeeetea eeegaaggge tgeeteaete
                                                                   1200
tgtggtgtca ggcactgggc tgtgtcctga ttcctcagag tatggggacc tgacatcttt
                                                                   1260
gggtccccaa gagttggctc ttggatgtgg aggcttgatg ctgcggttgg gggctgcact
                                                                   1320
acctgcgtcc gtggaagcct ctgcctcagc ggggacggcc tcctgctgca ggtcctgggc
                                                                   1380
agcccacagt agtgctagct gaggcccaga ggaacgggag gaaagggagg cagcgccgga
                                                                   1440
cggcgcagct ggccaagagg cgggcggggc cagaaatacc tcatgcccct gcaccagccc
                                                                   1500
ctccgtctcc aggccccagg cctctttgtg gacccatctt cctcctctgc caccccgatc
                                                                   1560
ttcactcgga tacctcttga tttctgtgga taagggaagc ggccacttct ccctcctga
                                                                   1620
gacccgagga tgcccctggt gggggtggcc ttctcaggac tcctgggtgg cacagcagca
                                                                   1680
ggacettgte atgggaetga tgetgageag ggaggggget gecaggetgg etgeegatge
                                                                   1740
teegtteaca taagecagtg tggttetggg gacetgagga geeetgtgge acceacaggg
                                                                   1800
ggcacctatg tetgeegtgg etectegggt ggtgeeetgt gtgacaaage ccaacagcaa
                                                                   1860
gggtgactcc tggcaggtgg gggcagcagg agggcagagg gcagagctct ggccacttct
                                                                   1920
geocactica tragggittg tgaactitgt cetteacete tittegigee etggitgiga
                                                                   1980
gattgeetet aacaggtaat gecaggggee etteacteeg eeeccatgae tgggaagagg
                                                                   2040
cctgtggcag cgccgctgga ccctaggagg ctcagaggca gtggtgtggg agccctgtct
                                                                   2100
gcaaggacgc agaataagca gtgagggcgg ctgcaggaga ggaaggggct cccacagccc
                                                                   2160
ccactgatgc cgctgcaggc ccctgtcgag ctggggtccc agccaggtgc ccccgcatgc
                                                                   2220
cctcctgcag ttgctggatg gatagggaca ccaggaagag gacaaactgc atggactcaa
gcgagctgga gccatcttct ccatagcatt acggacttag cataagagta aatgactgtg
                                                                   2340
aacgttgtag taaacggcag cttaagataa gtaagcagag acagtgttaa ggacgagttg
                                                                   2400
gtgtctgtgg tagettttag getgeteeta acceaceatt tattgeette tgagaggtgg
                                                                   2460
2520
acgcacatgc gtgtgtataa gcccacctga gtggggctcg tgcaggagaa ctgaggcatg
                                                                   2580
aaactctggc tcaaacctag gaattgagag cgtttctgtc ttttgggaga gtacttttct
                                                                   2640
ccacgagece tetggecact gtgggaggga aggacaaggg ttecettgga aatgtgaagg
                                                                   2700
gtettggeet cateceteag gtecececae ageaetteee actaettget tetgteeetg
                                                                   2760
ctggcagcct ctgtccctcc agaacggcta accagagcac actgtcccca ccgcctcccc
                                                                   2820
tttctctctg gaaagttgaa gtatctccaa aggcct
                                                                   2856 \
```

```
<210> 5678
<211> 3556
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3486)...(1910)
<223> similar to gi2264346 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<400> 5678 gatgttaaca tactttgttg ctatatggaa cttaactctc tactgttttt ttaacaacaa 60 aagctaccct tatacaaccc accaatttaa tgaacaccat actttataaa ttaatacaac 120 gcaatctaaa tgcaccataa atttatattt gttaatcttg atattagaac atttttacat 180 ttcaaactac ataaaaatat aacaatataa aatagaaatt tgttgacaac ttacgtccaa 240 aacatcacta tttcttatat tgcaactaag caacaagaca gcttacacag ctctccagaa 300 aacatagtgt tttttgtgtt atcaacaaaa atcagcacaa tcccacacaa taatgtcttc 360 aatttattat etttteeaca gtacacattt tteacaaace gtaaateett tgeagttatt 420 caaagtgtgt aaacaattgc ctgaatcccc atatcccccc ccctcggctt aaggttgtga 480 atgttttaag teetteaate aagttteaae tetteeaett geataaggaa teaagageet 540 tetetettta aaatatgtgt gttttateat acageetgea atgeagtaaa teacagtgaa 600 agccctgggg aaaacaaaac aacatgatct ttacagcggg acttgaaact tcacaatagt 660 aaatgcagtt caagaagctt cccataataa aagcgcgggt tttcatttcc agaaatcaag 720 tcaattagaa accctaggtt ctacttaaaa acccattttg atttaaaagt gaaaacagtc 780 ccctatccat agtcatttta taaactctat acagtttcac ttgcagagat ttttttttt 840 ccagtctgga aaacagtagt gcaattacgt tttacttctt ttaagttata tagtccagga 900 tgtaaatagc tctgtggaaa gataagaaga tgctctggta aacaagaaat ttttgcaagc 960 ccatgctggc ttacgagtcc attaaagctt gtaagtccat cgtggctttc aacaaaatgt 1020 tgcatataca tcactgagaa caaagcagaa ataaataggc agaaatgact gtaaactgtc 1080 tcatttcaat gatttttcag taataactgg cttgatgaat tgattatata tagtcactta 1140 aataagcaga cagtagacag ttgcccttct ggatgttcca ctatggcatc cggcctggaa 1200 agccccaatg gagttacatt cctaaaatta aaccaaaaaa aaggtgggga gtggagggtg 1260 ggggataata gtttacagat gccacttgaa catgattcca tcaagtcagc cagttcactt 1320 agatttette ttaaaaagge ttttgatttt tgatggettt ttgettttet etceattatg 1380 acaaaggtca tgtgggatgc tgcttattct ggcaacactt ggggcttcct gaactggttt 1440 actgtcgttg ccagctgagg aacatgatgt gtggcgaggt ttaggcaccg ggatgccact 1500 ggaaagetgg tteatgetae aggatttete caaaatgeea ttgtacaett tgettgeagg 1560 actgaagatc atactettag tttetgteag acetacaeag tegggagaac cecaagaeac 1620 atccacagtt acaggegaat ccccteggga ggaatcctct agggacacct catctcttga 1680 tatctttcgc ggagataatg tttggtatat ctcgaggctt aaaggaggag actgtttcct 1740 tecaatggaa gaatttaagg agteacatte tgaagetgtg tetqqeactt eccattqett 1800 ttcagcagag aagtaaatgg cetetteete etetteattt egataaageg cagggcaact 1860 tgacactgag aggatatctg gatcagggga aggcaaggag tgtggtgtgt gttgcgggtg 1920 gtgagggtgc cgagggtgtg acgggtgggg ggcgtgtgga gcaagctgag ctcgctgagg 1980 ctgaggcgag gacggcacaa tgctgcggcg tgaacggcac aggctgctgc ttctggctaa 2040 tgatccagga ggtttagcca tggtcccggg aaattgtgac actattgggg gtgtgtcttc 2100 atctaagtca tcaactcctc cagcaattgg atagggtgga atggagactc tgggcatcac 2160 cacccagctg tgatcagaat aaagggaaga ggtcaggctg gggagtcctg agttatgggc 2220 tatctgaaag ccacagatct tctcaatttg ttgccagcga aaaagtcgtt ctcgtaaaca 2280 agttgtcaac tcagagagag ctttctttgc ttccagaatt ttgtggtcta cctcatctag 2340 ggaggagetg tgtgcaacgt gcagagtece aaagactgtg ettetettet tittaattit 2400 ttetgeetea tetttageaa tagetagetg cattteageg ttttgtettt taatattgta 2460 gtattgcact tctacttcat gtgttaactg aagccatttc tgaagtgcat ctggaacaga 2520 ccaactgctt ctcagttcaa attctttttc ggcctttttc agagccatgc gaacctgttc 2580 caatteetgt tetgeatact gaegtetact caatteacat teageteect ecettagete 2640 totcagooga caagootoot cotttgoata attgatttoa tocatoattt tgogotataa 2700 attitgetti tetacageaa cattietgit tietteetgi geettiteaa geetetetig 2760 taagtccatt agactttgct ctgcagtttg taagctctct aaatctttca tcatttttgc 2820 aacatgitci titgatgici tattcigcgi ataagcaaac cagcagccic caacaccaat 2880 tactatagaa actgtgagga taaaatcttt catccagtta tgaggtgggc gtgttagagg 2940 tccaaacaaa accacatcca atgccttgag ctgaagtttt tgtctgtgac tccggtcact 3000 gattttcaac tgggagatca taaatgaagg ttcgtgcact gctatcctgg gaagtgtcgt 3060 teetttgaca ttgttgtete taaaattett eteatattgg ggtagtteaa caaactetat 3120 caaccactga agagtgtctt caagggtcca attatgaact tctgatgttt tccatcgttt 3180 ccataaatcc tcaatcgtta tatgtttatc ttctctgtgc agatggctgt gtttattagt 3240 agcatcttta tatttcatat cttctctgat gaattcatca ctttcctcta cttcaattcc 3300

```
accatettig teateateea titigittatg tattgittiga agagetteea gaetaaatet 3360 giettettet giaaageatg giggaeteag tgaeatgeag gigatettatig getggaetig 3420 gigteteatg eetgtaatee eageactiet gigaggetgag gagggiggat tgetigaget 3480 cagaagiteg agaecageet gigeaacatg gigaaacaca gietettita titetettet 3540 titetaggit atatte 3556
```

<210> 5679
<211> 446
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (150)...(24)
<223> similar to gi3649785 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5679 cccgccactc ctgaggagaa ggggacgcgc ggcgcgctcc tcaccgggcc cgggcccagc 60 gcctatcgcc gcccacgcga gcctcacgaa tccaggaatg cggaacccga ggatactgag 120 ggccactgta cattgcaaaa aaatgggaca aaagacttag tggaaagggt ataaaagctg 180 atgaagcaga gcctgaggat tttgtggtgg aaaaagtact acaccaaggt gtggtgaatg 240 ggaaggtgga atattccctg aagcggaaag gatttacact tgctgacaat aattgagaac 300 ctgaagaaaa cttagatttt cctgagttca ttgaactatt tcttaatcct caaaaaaact 360 ggtaaaggaa aagatagtac aaaaagaaaa tctttatccg agagtgaatc tgatgacagc 420 aaatgaaagg gatgctgctg aaaaac 446

<210> 5680
<211> 1979
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (405)...(1824)
<223> similar to gi4154598 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5680
gaaaagctgt gttaaacttc tctgcatctg gaagtgtgat ttcccttact gggtccaatc 60
caatgcatga tgctagcatg tggcatctga agaaaaatgg aataattgta tacctggatg 120
tacctctact aaatctaatt tgccgcctaa aattaatgaa gacagatagg attgtaggtc 180
agaattctgg aacatctatg aaagacttac ttaaatttag aagacagtat tataagaagt 240

```
ggtatgatgc tcgtgttttc tgtgaaagtg gggcttcccc agaggaggta gctgacaaag
                                                                      300
tgctgaatgc aattaaaaga taccaagatg tggactcgga aacattcatt tcaacaagac
                                                                      360
acgtttggcc tgaagactgt gaacagaagg tttcagcaga attctttatt gaagctgtaa
                                                                      420
ttgaggggtt ggettetgat ggtggeetet ttgtteetge aaaggagttt eeaaaattaa
                                                                      480
gctgcgggga gtggaaaagc ctagtaggag caacctacgt agaaagagca cagatactgt
                                                                      540
tqqaaaqatq tatccatcct gcagacatac ctgctgccag gttgggagaa atgattgaaa
                                                                      600
ctgcttatgg ggaaaacttt gcctgctcaa aaattgctcc tgtcaggcac ctttcaggca
                                                                      660
                                                                      720
accagttcat cctggagttg tttcatggac caacaggatc atttaaagat ttgtctttac
agettatgee teatattttt geacaatgta teecaccaag ttgcaattat atgatacttg
                                                                      780
tagctacttc aggagacaca gggagtgcag tcttaaatgg ttttagtcgt ctaaataaga
                                                                      840
atgataagca aaggatagct gtggttgcat tttttcctga gaatggagta agtgattttc
                                                                      900
aaaaagcaca aataattggc agtcagagag aaaatggatg ggcagtgggt gttgagtcag
                                                                      960
attittgatti tigccagaca getataaaaa gaattittaa igatteigat titacigget
                                                                     1020
ttcttactgt ggaatatgga acaatcttaa gttcggctaa ctccataaac tggggccgac
                                                                     1080
tacttccgca ggtagtttat catgcttccg catatcttga tcttgttagt caaggattta
                                                                     1140
tttcttttgg aagcccagtc gatgtctgta ttcccacagg aaactttggt aacattttag
                                                                     1200
cagcagtgta tgccaaaatg atgggaatcc cgattcgaaa atttatctgt gcctctaatc
                                                                     1260
agaaccatgt ttggactgat tttataaaaa cagggacatt atgatctaag gggaaaggaa
                                                                     1320
aactaggcac aaaccttttt caccgttcaa tagatatttc ttccaaatct ttcaaaccta
                                                                     1380
gaacgacatt tacacttgat ggctaataaa gatggacagc taatgacaga attatttaat
                                                                     1440
cgattagaaa gtcagcatca tttccagata gaaaaggctc tagttgagaa acttcagcag
                                                                     1500
gattttgtag ctgactggtg ctctgaggga gagtgcctag cagctattaa ctccacctat
                                                                     1560
aatacttcag ggtatatttt ggatccacac actgctgttg caaaagtggt tgcagatagg
                                                                     1620
gtgcaagaca aaacttgccc tgtgattatc tcatctacag cccattactc aaagtttgca
                                                                     1680
cctgctatca tgcaggcttt aaagattaaa gaaatcaatg agacttcatc aagtcagctc
                                                                     1740
tatttgctgg gttcatacaa tgcattacct ccactgcatg aggetttatt agagagaaca
                                                                     1800
aaacagcaag agaagatgga gtaccaggtc tgtgcagctg atatgaatgt cttgaagagt
                                                                     1860
catgtggaac aacttgtcca aaatcaattc atatgaaagc tttcagagta aatttttttt
                                                                     1920
tetagetata ageatgeaat aataaatete aaacaetgat ttggagtaaa aaaaaaaaa
                                                                     1979
```

```
<210> 5681
<211> 4567
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (329)...(3922)
<223> similar to gi3882179 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5681
agaggaagaa aatggcagag aatacaaatt tgatgtttcg tcagagttac tagagtggat
                                                                       60
ttggcatgat aacatgcagt ttcttcaaga caaaaacatt tttgaacata catattttgg
                                                                      120
atttatgtgg caattgtgta gttgtattcc cagtacatta ccagatccta aagctgtgtc
                                                                      180
cttaatgaca gcaaagttaa gcacttcctt tgtcctagag acatttattc attctaaaga
                                                                      240
aaagcccacg atgcttcagt ggattgaact gttgacgaaa cagtttaata atagtcaggc
                                                                      300
agettgtgag tggtttttag ategtatgge tgatgaegae tggtggeeaa tgeagataet
                                                                      360
aattaagtgc cctaatcaaa ttgtgagaca gatgtttcag cgtttgtgta tccatgtgat
                                                                      420
teagaggetg agacetgtge atgeteatet etatttgeag eeaggaatgg aagatgggte
                                                                      480
```

```
agatgatatg gatacctcag tagaagatat tggtggtcgt tcatgtgtca ctcgctttgt
                                                                        540
  gagaaccctg ttattaatta tggaacatgg tgtaaaacct cacagtaaac atcttacaga
                                                                        600
  gtattttgcc ttcctttacg aatttgcaaa aatgggtgaa gaagagagcc aatttttgct
                                                                        660
  ttcattgcaa gctatatcta caatggtaca tttttacatg ggaacaaaag gacctgaaaa
                                                                        720
  tcctcaagtt gaagtgttat cagaggaaga aggggaagaa gaagaggagg aagaagatat
                                                                        780
  cottetetetg geagaagaaa aatacaggee agetgeeett gaaaagatga tagetttagt
                                                                        840
                                                                        900
  tgctcttttg gttgaacagt ctcgatcaga aaggcatttg acattatcac agactgacat
  ggcagcatta acaggaggaa agggatttcc cttcttgttt caacatattc gtgatggcat
                                                                        960
  caatataaga caaacttgta atctgatttt cagcctgtgt cgatacaata atcgacttgc
                                                                       1020
  agaacatatt gtatctatgc ttttcacatc aatagcaaag ttgactcctg aggcagccaa
                                                                       1080
  tectttettt aagttgttga etatgetaat ggagtttget ggtggaeete caggaatgee
                                                                       1140
  tecetttgea tettatatte tgeagaggat atggaggtg attgaataca ateettetea
                                                                       1200
  gtgtctagat tggttggcag tgcagacacc ccgaaataaa ctggcacaca gctgggtctt
                                                                       1260
  acagaatatg gaaaactggg tegageggtt tettttgget cacaattate etagagtgag
                                                                       1320
  gacttetgea gettatette tggtgteeet tataceaage aatteattee gteagatgtt
                                                                       1380
  cegggeaaca aggtetttge acateceaac cegtgacett ceaeteagte cagacacaac
                                                                       1440
  agtagtecta catcaggtet acaaegtget cettggtttg etetcaagag ecaaaettta
                                                                       1500
  tgttgatgct gctgttcatg gcactacaaa gctagtgccc tattttagct ttatgactta
                                                                       1560
  ctgtttaatt tecaaaactg agaagetgat gttttecaca tattteatgg atttgtggaa
                                                                       1620
  ccttttccag cctaaacttt ctgagccagc aatagctaca aatcacaata aacaggcttt
                                                                       1680
  gctttcattt tggtacaatg tctgtgctga ctgtccagag aatatccgcc ttattgttca
                                                                       1740
  gaacccagtg gtaaccaaga acattgcctt caattacatc cttgctgacc atgatgatca
                                                                       1800
  ggatgtggtg ctttttaacc gtgggatgct gccagcgtaa tatggcattc tgaggctctg
                                                                       1860
  ctgtgagcag tctcctgcat tcacacgaca actggcttct caccagaaca tccagtgggc
                                                                       1920
  ctttaagaat cttacaccac atgccagcca ataccctggg agcagtagaa gaactgttta
                                                                       1980
  acctgatgca gctgtttata gctcagaggc cagatatgag agaagaagaa ttagaagata
                                                                       2040
  ttaaacagtt caagaaaaca accataagtt gttacttacg ttgcttagat ggccgctcct
                                                                       2100
  getggaetae tttaataagt geetteagaa taetattaga atetgatgaa gaeagaette
                                                                       2160
  ttgttgtatt taatcgagga ttgattctaa tgacagagtc tttcaacact ttgcacatga
                                                                       2220
  tgtatcacga agctacaget tgccatgtga etggagattt agtagaactt etgtcaatat
                                                                       2280
  ttctttcggt tttgaagtct acacgccctt atcttcagag aaaagatgtg aaacaagcat
                                                                       2340
  taatccagtg gcaggagcga attgaatttg cccataaact gttaactctt cttaattcct
                                                                       2400
  atagteetee agaaettaga aatgeetgta tagatgteet caaggaaett gtaettttga
                                                                       2460
  gtccccatga ttttcttcat actctggttc cctttctaca acacaaccat tgtacttacc
                                                                       2520
  atcacagtaa tataccaatg tetettggac ettattteee ttgtegagaa aatatcaage
                                                                       2580
  taataggagg gaaaagcaat attcggcctc cgcgccctga actcaatatg tgcctcttgc
                                                                       2640
  ccacaatggt ggaaaccagt aagggcaaag atgacgttta tgatcgtatg ctgctagact
                                                                       2700
  acticitite trateateag treatecate tattatgeeg agtigeaate aactgigaaa
                                                                       2760
  aatttactga aacattagtt aagetgagtg tectagttge etatgaaggt ttgecaette
                                                                       2820
  atcttgcact gttccccaaa ctttggactg agctatgcca gactcagtct gctatgtcaa
                                                                       2880
  aaaactgcat caagcttttg tgtgaagatc ctgttttcgc agaatatatt aaatgtatcc
                                                                       2940
  taatggatga aagaactttt ttaaacaaca acattgtcta cacgttcatg acacatttcc
                                                                       3000
  ttctaaaggt tcaaagtcaa gtgttttctg aagcaaactg tgccaatttg atcagcactc
                                                                       3060
🔩 ttattacaaa cttgataagc cagtatcaga acctacagtc tgatttctcc aaccgagttg
                                                                       3120
  aaattteeaa ageaagtget tetttaaatg gggaeetgag ggeaeteget ttgeteetgt
                                                                       3180
  cagtacacac teccaaacag ttaaaeccag etetaattee aaetetgeaa gagettttaa
                                                                       3240
  gcaaatgcag gacttgtctg caacagagaa actcactcca agagcaagaa gccaaagaaa
                                                                       3300
  gaaaaactaa agatgatgaa ggagcaactc caaataaaag gcggcgtgtt agcagtgatg
                                                                       3360
  aggagcacac tgtagacagc tgcatcagtg acatgaaaac agaaaccagg gaggtcctga
                                                                       3420
  ccccaacgag cacttetgac aatgagacca gagacteete aattattgat ecaggaactg
                                                                       3480
  agcaagatct teetteeect gaaaatagtt etgttaaaga atacegaatg gaagtteeat
                                                                       3540
  cttcgttttc agaagacatg tcaaatatca ggtcacagca tgcagaagaa cagtccaaca
                                                                       3600
  atggtagata tgacgattgt aaagaattta aagacctcca ctgttccaag gattctaccc
                                                                       3660
  tagccgagga agaatctgag ttcccttcta cttctatctc tgcagttctg tctgacttag
                                                                       3720
  ctgacttgag aagctgtgat ggccaagctt tgccctccca ggaccctgag gttgctttat
                                                                       3780
  ctctcagttg tggccattcc agaggactct ttagtcatat gcagcaacat gacattttag
                                                                       3840
  ataccetgtg taggaccatt gaatetacaa tecatgtegt cacaaggata tetggeaaag
                                                                       3900
```

```
gaaaccaage tgettettga cattaggtgt ageatgteta ettttaagte eeteaceee
                                                                     3960
aacccccatg ctgtttgtat aagttttgct tatttgtttt tgtgcttcag tttgtccagt
                                                                     4020
qctctctqct tqaatqqcaa qataqattta taggcttaat tcttggtcag gcagaactcc
                                                                     4080
agatgaaaaa aacttgcatc ttcagtatac ttcctaaagg gcaatcagat aatggatatg
                                                                     4140
ttttatgtaa ttaagagttc actttagtgg ctttcattta atatggctgt ctgggaagaa
                                                                     4200
cagggttqcc tagccctgta caatgtaatt taaacttaca gcatttttac tgtgtatgat
                                                                     4260
atggtgteet etgtgeeagt tttgtacett atagaggeag attgeeteeg ategetgtgg
                                                                     4320
ttcttattat caaaattaag tttacttgta tacggaacaa ccacaagaaa tttgattctg
                                                                     4380
taaagaatcc tctttagctg tggcctggca gtatataaat ggtgctttat ttaacagaat
                                                                     4440
acctgtggag gaaataaagc acacttgatg taaaaataat tgttttattt ttattgacat
                                                                     4500
gactgattga ttgattgcta ttctgtgcac ttaattaaac tgattgtgat gacttttaaa
                                                                     4560
                                                                     4567
aaaaaaa
```

```
<210> 5682
<211> 3213
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3046)...(644)
<223> similar to gi5457357 in the genepept database release 114;
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5682
ttttttttttt tgttcagaaa agtacagtgt tgacatttta ttttttatgt aaagaagcca
                                                                       60
tatttacata atacattcat atttttaagt atgttacage teetgtagaa aaccatttee
                                                                      120
attaagacag caacaagtga totggattca atotttaaaa tattaagtca aattaaaatg
                                                                      180
ttottatoaa gaotocaatt taatttoaca goocatotgo cacaggggaa otgaggagaa
                                                                      240
acaggaatga agagtgggcg acaaagagaa agcatccctt cccacacgcc aagagtccag
                                                                      300
tgcaacgatc cctgccacac ggtcagccga ccccacttgg tgccacaggg tccagcctcg
                                                                      360
gecactetgg geteaacett tecageacgt etgggageee aatgaggeta tgggacagtg
                                                                      420
tgeatttece teaaggeete eggaaagtea eetgeeacee aetgtgaeet tetgaggetg
                                                                      480
aaaggactta aggacteett teeeceatea ttteagetgg eecagtgget gggetaaaat
                                                                      540
cagogoagoa tttoccatto ttotgaaaag coacagotga aataatgoac cagotgaaaa
                                                                      600
ccaccagtgg agagacttga gatgggcctc cctctgggcc tctagttggc aactttctca
                                                                      660
cccgggggct cctctttctc cttttcccgc tccttgttcc agtccttaag gccttctgga
                                                                      720
agtgaggtgt ceteateeaa getgeeagtg cetteeacaa attetteata ggtaagattt
                                                                      780
ttccgcaaat ggtctggggg ccaaaaagtt caaccatatc attcctaacc aatacttctt
                                                                      840
tttctaacaa cagaagagca accttctcca cgtcagcttt cttttctgtg agaagagcta
                                                                      900
etgttetttt ataageatea ttaataagta ttegtaette ateatetate aatettqeaq
                                                                      960
tggcttcact gtaaggtttc tccaatacca ttgtccccct gacgtgggag gtcaaaggag
                                                                     1020
atttgcccaa ccttttcatt catgccaaac tgaaacaaat ttgggcataa tggcactctg
                                                                     1080
aagttaactt ttcacaagtc atcttgagca ccagttgtaa ttcttccaaa qaaqatttct
                                                                     1140
tcagagactc gaccacctaa agtcatacac atcctatcca agagctgctc tttggtatag
                                                                     1200
aggtattgtt cttttggtaa atactgagca taacctagtc ctttgccacg tgggatgatg
                                                                     1260
gatacettta aaagegggte tgegtgetee agataceage eggeaacege atggeetget
                                                                     1320
tegtggtatg ccacagtett etteteetea ggetgeaaga acetgegttt tettetetaa
                                                                     1380
gccaccaatc actogotcaa ttgcctgttc aaagtgtttc tgatttatgg aatctgacag
                                                                     1440
atgeettgea geaateaacg cagetteatt acagacatta geaacateag cacetgaaaa
                                                                     1500
```

```
ccctggagtt aaagatgcca gttttcttgc caatttatcc ttctccaggg tactgtccag
                                                                     1560
ttttagcggt cggagatgaa ctttgaaaat agaagctctt ccttttatgt ctggtggtcc
                                                                     1620
aataaagatc tgcctgtcga aacgccccgg cctaagtagc gcggggtcca ggatatctgg
                                                                     1680
tegattggtg ceggecaaaa tgaegacatt tgttgttgta ttaaaaccat ceateteeac
                                                                     1740
cagcagetgg ttgagtgtgt teteetgete actetgeeet ceaaagttge etetteetet
                                                                     1800
cttccttccc accgcatcga tttcatcgat gaagaggatg caaggggcat tcttccqaqc
                                                                     1860
aagggcaaat aagtctcgga ctctagcagg gcccacacca acgaacatct ccaaaaactc
                                                                     1920
agatecacta aeggtgatga aggggacatt ggetteteeg getgtggeet tagetaqeaq
                                                                     1980
cgtcttccca gtgcctggag gaccagtgag aatggcaccc tttgggattt ttgctcctag
                                                                     2040
gtettgatae tgetttgggt ttttcaagaa attcacaaat tecatgatet etagettgge
                                                                     2100
ctcctcacag ccagccacat ctttgaactt cacatcaatt tcatccttta agaccttggc
                                                                     2160
agtggtttet eegacactga agagteegee catecetegg cetgteegge caatggeage
                                                                     2220
aggccctctt ctgatggtgt agagcaagaa ggcgatgatg agcaccgtag gcagcatgct
                                                                     2280
cagcagaaaa gagccatcac tttcagcaat gtagacaaca ggcacccgat tttctccttc
                                                                     2340
tatgcccaat tcctgctgta aagtttccag attccgttca aaggtgtcca cactgccaat
                                                                     2400
attaaaccaa acgtattgcc catcaacagg agtttttcct ggtgtaaagg tcactcgaac
                                                                     2460
aaaacgcttg ttgacgactt ccaatctgtc tactactcct tttgaaagat agttattgac
                                                                     2520
aaagteette caagtgattt eteteeegga tetettgage ageaagtaaa acatgaetee
                                                                     2580
accecagaac agageagtee agaggaagaa cateetgaaa teettgtegt cecatggaat
                                                                     2640
gtcaccette tgaaacetgg accaccagtg agaatcatet ttettgecac etegttttee
                                                                     2700
accyccacca cetectecte cagaagageg tytygtagea getygettty attettittt
                                                                     2760
eteteceata aettetttag gtteaetage tittttteea titttteeat taggaaagta
                                                                     2820
ttttccaaat cettttgggg gtcgagaaca gaatetttga taagcagcaa ttatatetgt
                                                                    2880°
caaaagagaa tttctgctgg cccttgcttg agttgtaaca aatcggtaaa gcgtccqqaq
                                                                    2940
gcagggetge tegeceggge ecaegeegee aggeaegagg/agetgetgta ggeegegggg
                                                                     3000
ccagcagccg ccccggcccc acagccgcaa acagcggtgc gccatggccg ccgccgtggc
                                                                     3060
ceteteggee egggaegetg egeaggegeg ggeaggegae gaetggegge etegggaage
                                                                    3120
gggctcggct cggggaaagg ccgccaggca gcgaagcgcg ccggcggctc acggaggagc
                                                                    3180
ccaagetete aaegeggegt éteceetegt gee
                                                                     3213
```

```
<210> 5683
<211> 2896
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (390)...(995)
<223> similar to gi4262296 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5683
ccatatatgg taccttctcc cggatgggaa catacaaagg ggaaacaact gcctgaggtg
                                                                       60
ggaaggtgac agtactacct tettetagaa aacaaagatt gttcaaccac caccatqaqa
                                                                      120
acaggtggaa aatateteta tagacecaae etggeaatga agtataaaea tegeaeeeeg
                                                                      180
cagggettet ettggtgeee tagttgggtt catttttgtt tgtgactatg aatgggaaga
                                                                      240
agtcacaccc tgtaaccact ccaactccct aaggagtcac ctcttcttta aggaatagct
                                                                      300
ttcccttgta tctaaaaaac ttggaactga catgaatgaa cgttggccac tcttacccct
                                                                      360
ccaggggtca caatctataa cgcctaggac ccaagaatat cagaaataag taagcaataa
                                                                      420
aactaattct ggcaggaatc agggtggcaa taggactagc agcaccctgg ggtggctttg
                                                                      480
```

```
cctaccatga gttaacgcta aagaacttgg ctcaaatcct agaatcctta gccaccaacg
                                                                      540
gagatcaggc attaaagaga attcaagagt tececagact etggaaaatg tagttgttga
                                                                      600
taacagacta gcattggatt atttactagc tgaacaaggt ggggtcttgt gcagttatta
                                                                      660
ataaaacctg ctgcacatat attaactctg gacaggttga ggttaacatt caaaagatct
                                                                      720
atgagcaage tacctagtta catagatata accagggcac tgcccccaac tatatctggt
                                                                      780
caaccatcaa aagtgootto ccaagtotca cotgttttto acctottota ggacotttga
                                                                      840
caactgtctt gttacaaatg tttggtcctt gcttctttaa cctcttagta aagtttgtgt
                                                                      900
attictagatt accacagitic cagagacaat getggeacaa ggetteeage ceateetigte
                                                                      960
cactgacacg gagaatgaaa tcgtcctgcc tctgggctcc ttagatcagg tatccagaga
                                                                     1020
tttttactcc tccagtgcca ggcagggcct acgtccataa actcagcagg aagtagttac
                                                                     1080
ggaaaacaga totocgooot totgcagooo cottaagatt aaggaggagt atotaatoto
                                                                     1140
tgaaggggga atgaggtagg aggtgggact caactetgga agtggggete aggcacteag
                                                                     1200
accaaactga gcactagcta aaataggtcc agggcagatg ctagtttcca taggacacac
                                                                     1260
cgacctgtgt caagtcagtt caccatqqqc tcctqqqcaq cacccaqqaa qttaccaccc
                                                                     1320
teaccetggg aaatgtettg cataaactge ceetteaatt tgeatataat taaaagtgga
                                                                     1380
tacaaatacc actgcagaac tgcctctgag ctgctactgt gggcgcacag cctgtagggc
                                                                     1440
agecetgett tgeaaggage agegeetetg etgeetgetg tgeacageeg geegetteaa
                                                                     1500
taaaagttgc taacaccact ggcttgcctt gagttccttc ctgggcaaag ctaagaaccc
                                                                     1560
tecegggeta tgetteaate ttagggeteg egtgteetge ateaetggga teateteeea
                                                                     1620
gtaaactagc cacacttaca tccatgtgtc agggacattt ctggagaaag cagcccagga
                                                                     1680
cactgitgaa taaaacacac aatagictci giggictici ccaccccacc ccacaccagg
                                                                     1740
caccctcage ttgattctcc tttttaattg cctgtaagca gggaagcaca atgttttcac
                                                                     1800
attetttgta aggeetttgt tetaetaaaa tetaacetea gageacaatt ttaaactaga
                                                                     1860
tgaaagagtt getgegeetg aageaetgea aacaceteet caccacacat gtgeaeteae
                                                                     1920
cetggacace etcactcace etgacacect cactcetcac eetggactce etcactcace
                                                                     1980
ccagacaccg teactectca ccctggacac ctcactctgc accctggaca ccctcactca
                                                                     2040
ccctggacac gttcactcac cctgacaccc tcactcaccc tggacaccct cactcaccct
                                                                     2100
ggataccete actecteace etggacacce teacteacce tggataccet cactecteac
                                                                     2160
cotggacact ctcactcacc otgacaccct caatcctcac cotqqactcc otcactcctc
                                                                     2220
accetggaet cecteactee teaccetgga cacceteatt ceteateetg gacacectea
                                                                     2280
ctecteacec tggacacect cactecteac cetgacacec teactectea ceetggcace
                                                                     2340
ctcagtcacc ctgacaccct cactcctcac cctgacaccc tcaagtcttc acctccctgg
                                                                     2400
gtgcagcctg ggacacgctt tecetaactt etgaaggete agteeteete aagecaatet
                                                                     2460
catctcaaat tgcaccctcc ctcagagagg tcttccataa ccgcccttat aaagcaggat
                                                                     2520
tettteacca atacceette ceacatggea etgteteaca geacteetet aaaagtetgt
                                                                     2580
ttactteett gacaatetgt etteettata aggggaggtt etgtaaaage caagaetete
                                                                     2640
tetgtetägt tgaetgttge ataccaggge ttagaccaag geeetgacat geagtaggtg
                                                                     2700
cttaatatgt tttgaggcaa ggtcttgctc tgttgcacat gctggagtgc agtggcacaa
                                                                     2760
tegtaattea ttgcageett gaacteetga geteaagtga teeteetgee teageeteet
                                                                     2820
gagtagetgg gactacagge atgeaceace aagettgget aatttaaaaa aaaaattata
                                                                     2880
tagataggga cttgct.
                                                                     2896
```

```
<210> 5684
<211> 3328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3019)...(1805)
<223> similar to gi4098299 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5684 ttttttttt ttgagatttt caaaatattt ttatatagaa attttttaca aagattttac 60 aacatagcaa atcattatgt catactgtag aaagatgaag caaaggatta aactccaagg 120 ataaagaaag tgctcatagc aacgtattgc agtctccatg aaagtgcata taaacggtta 180 aggcaaagta ccatcttggt acagacatgt tgcaaactga cttttaaaac aattttttaa 240 aatatataca aactttttt cttctattct tctcaaaggc atttgaaagg gatactttta 300 tgaatattet tgetgtagaa caatgtagaa ataaettetg ggtataaaaac agtaaaaata 360 aaaatattet aeetgagtgt gttaaateaa gtgatttgta aaacaaaace tteacaagtg 420 tgggetttet acatgtaact tgecaggetg aaggettaca eeetcatgtt etacaacaca 480 gatcactaat gatgataaca tgagttaaat tgggattett gecettetgt gtggettttg 540 gettetaggt tetatgacca aactattgac atatttgaag tetgtatgea gteattgtgt 600 gataaatcta ctttacagct ttgcttctac ctgcagctta catgataacc atgctgtgaa 660 gtgctacata tgcttcatac aatatgttgc cccatctgat aataaaaata caaaggtgct 720 ctttaagcta aaccataaac cttattagag aattctagtt aagtgttttg tttttccaca 780 tacatgtaaa taccttaaga tcaataggat caataaggat aatattagtt atcaaaattt 840 agtcttcata cttgaagaat ttgtttttaa aaataactaa gatgcaaaaa aataaattag 900 ctagtcttga acaagagtga gttttgcaga aaactgacat atctgaattc tagtacagat 960 aagaatetgt caaatgataa etgaatteae gtgactaace actettttae gtaagattgt 1020 atctactcat gagaaatagg ggaattcagt gttatcatta tagtctccgt atttaaactg 1080 agtttttctt ttccaatttt ttttccatgc ctcaacataa gggaaattaa tcagttaatt 1140 tetgetgaet taggttteet aaacagettt tagtteteaa ggeacagetg tggtaaaaae 1200 agagcaaaac acccagccat ttattggaat tctgcagtac aaaataagca catgtgctct 1260 atataatcta gtaacaggat agcaacagtt aaactgtctc aaacaacaga tgtatttgct 1320 tgattttcct tcctaacttc ttttgcatca ggaccgcaag caaagagctt gtttcccaga 1380 gtattttggg caaatcggaa atacataatg tggcccattg ccacaaagga gactgaaatc 1440 aatacgagca agccaaaagc ttcaggattt ggagccagga tgaccatgat gaaatgcaga 1500 agatcaagaa gatagttcat ggagttctgt acaccattta taatgcctct ttcagattca 1560 attacatttt cttgcagcaa ctgtgtcaca gttaaatcaa aggaccaaag accgattcta 1620 gcagcaatga cgcctgcaaa cagcagactg acagagatta tgggcacaga ttcaggactt 1680 gtctccggga caatattagc agaattagac ccattagaca tgtatatttc agttgtaatt 1740 tcaggtatet tggtaggtgt aattgactet cettgaatga acettgateg gatatettea 1800 aaaggagaaa cggacaagte cagggggett ccaggcatga atacagagat cacacacaag 1860 atcaaacagg aaagctgtgc caatcctgag atcagacctg tccgaaccaa accacatttt 1920 cgacgtagcc aagtaaaagc tacagttccc attattccag ttatagctga tgctcccatc 1980 aaaatactga ggatggaacc actcagtccc tgagtgtagg cgtaccctgt ggtgatgcag 2040 tcaaagccca ggacagtcat ataaaggaaa gcaagaccca tgccagccag aaacacaggc 2100 tggttgtagt aggagaccca tccatctcgg aaggtacgga agggctcagc catctgggag 2160 gcacaagtag gctcttgctc atgttcaagc tcatggatgt tagagtcttt cacacccatt 2220 agatgagttc cctccagggg ttttggctca gtatctttgt gtaaattcag ctgtttcaat 2280 teagttteet ettetttaag accagettte acagetagag etggggtttt etggtaaace 2340 ttccagagca ggacgtactc cacgcacatg gataccaagt tccatcccga aataaagcca 2400 cagccgatga ctggggagcc aaatgtcata atctggccaa cagccatggg ggctaagatg 2460 ttggttaact ggtcaatcct tcgtattgtg gcattcatat ttgctagttt gcttctgtct 2520 teteetgeaa caacaacaat ecaateeett tggattgtga ttgcagtage agtactggee 2580 aaatttgcaa tatttgcaat agtgatgatc aggatatagc aggaagtgag aacccatcca 2640 tggtacatgg tcagaagctc atgtttatgt aagaaaacca tcatcaggat gattccacac 2700 aggatgactg aaacattotg taccaccage gaggtetggg ccactttaag tetagcatte 2760 ttgtccaccc agtcaccgat gatggctccc aggaccagaa cagaccctgc caccaccagc 2820 cegtagactg etgtcaaaag gaggetgttt ceatagaget etaccagaaa cacagacace 2880 gcaaagtgcc acatccgatc tccccaagta gagagagaat gaccaaggta gagaaggaat 2940 tttgcagagg tcaggtagtc ggccaaggat ccacagcatc ctctctggcg gttgtgatct 3000 eccgeeetgg teatgacact aggegacece getggetett etgeggetge tategetget 3060 gctgctctcg ctgaggtgct tgttaacagg agtgcaagga actggagata gcacctctaa 3120 aaacacaaca gccttgggca aaaagactac aacgacgact ttggcaaaga acaaaagaaa 3180

```
aggggcccag ggattttctt ttttccttct ttccaaactt agctaacact gtagctgaag 3240
ttggaaaggc aaagccttat ggaagcggtt tgggaggctc agcaggtcgt ccgagcctag 3300
cggacgccct gagccagctc ctcgtgcc 3328
```

```
<210> 5685
<211> 1727
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1728)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> n = a,t,c or g

<220>
<221> misc_feature
<220>
<221> misc_feature
<222> (1363)...(1553)
<223> similar to gi1770466 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5685

```
cgagcgcgga acgcgagggg ctgctggggt gtttgtcgca gcgggttttc ctcggcggtt
                                                                     60
tgeggagetg ctaggatgga geaggttgeg gagggageaa gggtgaeege agteeetgtg
                                                                    120
                                                                    180
tcagctgccg acagcactga ggagttggcc gaagtcgaag aaggagttgg agtagtgggc
gaagataatg acgcagccgc gagaggagcg gaggcctttg gcgacagtga ggaggacgga
                                                                    240
gaggatgtgt tegaggtgga gaagateetg gacatgaaga eegagggggg taaagttett
                                                                    300
tacaaagttc gctggaaagg ctatacatcg gatgatgata cctgggagcc cgagattcac
                                                                    360
                                                                    420 -
ctggaggact gtaaagaagt gcttcttgaa tttaggaaga aaattgcaga gaacaaagcc
aaagcagtca ggaaggatat tcagagacta tccttaaata acgacatatt tgaggcgaac
                                                                    480
tetgatageg ateageaaag tgagacaaaa gaagataett eeccaaagaa gaaaaagaaa
                                                                    540
aaattgaggc agagagaaga gaaaagccca gatgatctga aaaagaaaaa agcaaaggcc
                                                                    600
gggaagctaa aagacaagtc caaaccagac ctggagagct ccttggaaag tttagtttt
                                                                    660
gatttaagga caaagaaaag aatttetgaa gecaaagaag aactaaagga gtecaaaaag
                                                                    720
cccaaaaaag atgaagtaaa agaaacaaaa gaattaaaga aagttaaaaa gggtgaaata
                                                                    7,80
agagatttaa agacgaaaac aagagaagat cccaaagaaa atagaaaaac aaaaaaagaa
                                                                    840
aaatttgteg aateceaggt ggaatetgaa teaagtgtae ttaatgatte teeettteea
                                                                    900
gaggatgaca gtgaagggct acattccgac agcagagaag agaaacaaaa cactaaaagt
                                                                    960
gcaagagaga gagcagggca ggacatgggg ctggagcatg gctttgagaa gcccctagac
                                                                   1020
agtgccatga gtgctgagga ggataccgat gtcagaggca ggaggaaaaa gaagaccccg
                                                                   1080
agaaaggctg aggacactag agagaacagg aagctagaga acaagaacgc tttcttagag
                                                                   1140
aagaaaactg tgcctaaaaa gcagaggaat caagacagaa gcaaaagtgc tgcagagtta
                                                                   1200
gagaagetga tgeetgtate tgeecaaaeg ceaaagggee ggaggttgag eggggaagag
                                                                   1260
agaggeetet ggtecaegga eteageegag gaggacaaag aaaccaaaag aaatgaatee
                                                                   1320
aaaaagccca aaaaagatga agtaaaagaa acaaaagaat taaagaaagt taaaaagggt
                                                                   1380
gaaataagag atttaaagac gaaaacaaga gaagatccca aagaaaatag aaaaacaaaa
                                                                   1440
aaagaaaaat ttgtcgaatc ccaggtggaa tctgaatcaa gtgtacttaa tgattctccc
                                                                   1500
tttccagagg atgacagtga agggctacat tccgacagca gagagaagag aaaagcccag
                                                                   1560
atgatetgaa aaagaaaaaa geaaaggeeg ggaagetaaa agacaagtee aaaccagace
                                                                   1620
1680
ccaaagaaga actaaaggag tccaaaaagc ccaaaanaaa aaaaaaa
                                                                   1727
```

```
<210> 5686
<211> 818
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature'
<222> (337)...(279)
<223> similar to gi4691243 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5686 aagaccacat tteeeteate cetgtgteee ttgeggeagt tgeetgaggt cagagggtae 60 agtggtčaac etčtgačtga ceeteteáté tetetttgea gateteataa gtgeagggga 120 aaggggtggg gcagcagete ctateettee etcecagece tacteeggge eeggteaget 180 cctggccact gtactcaccg aagctgtggc ccagaatgga gaatcgattc catttcaagg 240 ctggaaatgc aaggagccag aaggtccggc tgggcacagg ctcagcccac gatcttgctt 300 ctagtcccca ggctcaggaa atcccttccc agcatctggg gtgtccaccc aggagactag 360 cttgggggac ccactggagg aagcgaactc ttcaactttc ccaagatctc ccgtgaattg 420 ctggcagacc tggggccaga gcccaggccc cactetcagg ccagcgctgc ttcctggatc 480 ctaccceged tecagtgata agagggggtg cectagagea cececcacac egeegaaaat 540 600 adacactoty titettacct gocacacto ticggatoto actoacaaaa giotggaggi aatatgggac acctgggetg taatgggacg agagcccatg acctccgaaa tccatggcaa 660 720 cgtaataaaa gtctgattca gtgaataaaa cctaatgcct cccggaaata aaaaaataat actgoctada cotocogggo ogottgttat aaaggggood atcaacacco coaaataacc 780 818 tttgtttgtc tattatagat cccaaccttt tatgtttg

```
<210> 5687
<211> 1836
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1786)...(0)
<223> similar to gi1006659 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5687

ttttttttt ttgaaggaaa ggaactttca atgagaaatc aaaacacagg ggaaccaaag 60
tgcaaatcat ccaccccca tgggggggc aatcctgaac cccacatcat cccctcagcc 120
cccttcaggc ccccagggc ggcccagggc tcggatgctt ctgcctcagg tagctcttga 180
```

```
gctgggggca ggccctctct gggacctcca gtttcttaga aaggtagacg gcagggagct
                                                                      240
tgaagcccat tcagggccta gggtgccgtt ccctcagggg cccttcgagc ccagtcaggc
                                                                      300
accegggeeg teceggeagt aaatgeeeag cegtteeege aacaceagea ceacectetg
                                                                      360
                                                                      420
ggcaagggtc tcgagtagtg gcgctagagg cagcctgggc cctgtgggca ggacccttgg
                                                                      480
tgggtatggc aggaaggggt cetgggteet cacgggaage acageaceag agetgetgge
                                                                      540
gcacagcagg aagtotgtgo agtagootgg aggcacagto aggtootggo ggtatttoto
ctccccage agetggcgca accectcage tactatgtcc ttgtgactgt acttgcageg
                                                                      600
ggcacggtcg gtgatgagag gctggggaaa gatgggcact tgctgccttc ggggaaggcg
                                                                      660
gggacccegg tatectggga getecagete caeggeegtg tecageaggg agaggtageg
                                                                      720
                                                                      780
acgcacaatc agagcatgag gggtgccact gatgtagttg atgaagccag gggaaaaaac
aaagtgcagg gctctgaagg gcaggcaccg cagttggcac agtgacatca agatgttgac
                                                                      840
tgtagccagg ggtgccaccc ctgcttcccg agccaggatc ctctcaaggc agggcataaa
                                                                      900
ctgctgttcc aggggcaggt agttcagtcg cccaaagggc aggaccaact tctgtaccac
                                                                      960
cttgctgctg agttgcgttt cctgaaccac caggaagtgg gcaatggctt ccagaagctg
                                                                     1020
gggctcccgc aaccggtgcc gggccaggtg ctgggccagg agcaccatca cgtggggagt
                                                                     1080
cagtteetet ggeettgeet etgeeagget getgateaga tgetgeegtg gataeegeag
                                                                     1140
                                                                     1200
aaaacggggg cagcttagag cagcttccaa cccttgccca cctcggagaa ggggctgcaa
agggggaggt ggcttcggag ggaggcggag ccttcgctcc tgttccaggg cacacaccag
                                                                     1260
gggaccatca gatggaaagc caagtaagac tgcaaggtgc agacacacgt ggatggtgtg
                                                                     1320
aatgtcaaag gaggggcagt ttcggatgat gagctgactc aagtcctgca gtgtgacctg
                                                                     1380
ctccacagga gggggccgtg gccgagaccc caagagctgg cccagacgac gaagcgccac'
                                                                     1440
cgagtagtgg tgggcgcgca ccttgctggg gttctggccc agccagcgca gcagctcccc
                                                                     1500
agggetette geetgtteea gaageegetg eagteettge acaggaeetg eactggggee
                                                                     1560
tectecaaca ggeeggteec eccatttget gggeeccaaa cageaggget gtactggagg
                                                                     1620
gatcagcagc aggccagaca gccgagcagg ggaggtctga gcagagagca ggactcgaag
                                                                    1680
catggagttg ggtgatggag accatgactc cccgggccct gcgcaggtcg ctccctcagt
                                                                     1740
eggteteggg geeeggggge egggtteece eegeggeete eteategget ageeaeegag
                                                                     1800
tecgecatet tececetegt geegaatteg aatega
                                                                     1836
```

```
<210> 5688
<211> 1450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (667)...(1239)
<223> similar to gi4826524 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5688
ccactctgct cagctccgct ccaggaaggc cacctcctcc tccccctcct cctcccgctg
                                                                       60
teaceaetea eegeteataa eeteaagggg gtggggaeee eagggetgga cacaeeeeae
                                                                      120
cgtggcccca gagctcagcc ggtcgcacgg acggacagtt ggaagccgga ccccagagcc
                                                                      180
tgaggtgggc agtgtgccag ggtcccttgc ggcctcctca agccctgtcc aggctatggg
                                                                      240
catcaagaca gcattgccgg cggctgagct gggcctctac tctctggtgc tgagtggggc
                                                                      300
cctggcctat gctggccggg gcctccttga ggcttcacaa gatggggccc acaggaaggc
                                                                      360
cttccgggag tctgtgcgac ctggctggga gtacattggc cggaagatgg atgtggctga
                                                                      420
cttcgagtgg gtgatgtggt tcacctcctt tcgcaacgtc atcatctttg ccctctccgg
                                                                      480
acatgtgctg tttgctaaac tctgcacgat ggttgcccca aagctccgct cctggatgta
                                                                      540
```

```
tgctgtgtac ggggccttgg ctgtgatggg cacaatgggc ccttggtacc tgctgctgct
                                                                      600
gettggteae tgtgtgggee tetatgtgge etegettttg ggeeageeet ggetetgtet
                                                                      660
tggccttggc ttggccagcc tggcctcctt caagatggac cccctaatct cttggcagag
                                                                      720
cgggtttgta acaggcactt ttgatcttca agaggtgctg tttcatgggg gcagcagctt
                                                                      780
cacagtgetg cgttgcacca getttgcact ggagagetgt geccaecetg accgecaeta
                                                                      840
ctccttagct gacctgctca agtacaactt ctacctgccc ttcttcttct tcgggcccat
                                                                      900
catgacettt gategettee atgeteaggt gageeaggtg gageeagtga gaegegaggg
                                                                      960
tgagctgtgg cacatecgag cecaggeagg cetaagegtg gtggecatea tggeegtega
                                                                     1020
catcttettt caettettet acatecteae tatececage gaeeteaagt tegecaaceg
                                                                     1080
cctcccagac agtgccctcg ctggcctagc ctattcaaac ctggtgtatg actgggtgaa
                                                                     1140
ggcggccgtc ctctttggtg ttgtcaacac tgtggcatgc ctcgaccacc tggacccacc
                                                                     1200
ccagcctccc aagtgcatca ccgcactcta cgtctttgcg gaaacgcact ttgaccgtgg
                                                                     1260
catcaacgac tggctttgca agtgagtagg agtgggtgg gggtggtcac agccatcttg
                                                                     1320
ccaggtgtct gagcagggca gtgccaagat gggtccacat tttaaaagat caccctggg
                                                                     1380
ccaggggaag caaagagggc agtgaggagg tatttgcaga gggtctggtg aaagatatag
                                                                     1440
aagttaggac
                                                                     1450
```

```
<210> 5689
<211> 1883
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1884)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1113) ... (971)
<223> similar to gi4335756 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5689
acteaceaac ceteceette caaceagaga aacteactge agtateteet tgaaagtetg
                                                                       60
gtgacgtgtc tgtctaagtg ctggtgagag gcacaggacc aactgagggc ctcacgcagt
                                                                      120
acceetggee acagggtgee egectaagee cacacetget gaetgeaaca ageecatgge
                                                                      180
caggacggaa cacagagaag ggtctgaggc ctggagcgcg ccatgaaggc catggggcaa
                                                                      240
gtgaggtetg etgagatage geaggtetge ggagetgaag tgeagetgea gaggetggte
                                                                      300
tggtgctgcg agaactggaa gaagctggga gctgtggtcc ctgtccacag agatgctgga
                                                                      360
aactgtgget gggagtgget etgaggeegt ggagagagag catetetgee eeaeggeate
                                                                      420
tgcgggtgag ggcaaggtcc tcaccagaca agtgcagctc caagtcccag atgttgggct
                                                                      480
ttttcttggt actgagacag cagtggggca gggtggggca gtggcaggaa ggcagggagc
                                                                      540
ctctcttgct acctcttctc catgctctgc atctgcagac tgagggaggt gaagctggcc.
                                                                      600
aggaggtcag tcacttcatc cacctgetet ttggtactgg tcatctgcag gegggtgcag
                                                                      660
aggtcatcca ggcgttctcg ctgctcatgt tgccctaggc gctccagata ctccctcagc
                                                                      720
atatggatga tetgetteae etecagaege acageettta ggeaetggge atggeeetee
                                                                      780
tgcaggatat tcagctttga cttggccagg tgcaggggtg tgcgaccagc tcggtccagg
                                                                      840
gcatctacac gggcccctcc tcgtagcagt gtggtgatga caggaacgtg gttggtgcag
                                                                      900
gccgccaggt gcagtggcgt gttccccagc ccatctcgct ggttaggatc agcaccatgg
                                                                      960
```

```
tccaggagca gctgcacaat ctggtcattg ccattgcatg aggcaaagtg tagagctgtg
                                                                     1020
eggeeettgt cateagetge acagggatee gegecatett ecageagetg etgeactgtt
                                                                     1080
tecacateat tggcattgge egagteeete agtetettea gagegtgeac eteettgeee
                                                                     1140
gtgggaggat gcatttcctg gctctgaggt ggcctggact ctgtggcttg agctgccctc
                                                                     1200
ctcaactcca gtttcctgct ccatcgctac acctccaacc tcctctcccg tcacctgctc
                                                                     1260
ttctgttata cagacceggg tgaggacate aagceeteet gaacaagetg ggataatett
                                                                     1320
cctggcgaaa gatccttaac ttcattacat ctgcaaagcc cctttgggcc atacaaggta
                                                                     1380
attttgacag gttcctggga ttaggacatg ggcatcttgg gaggccacta ctggcctacc
                                                                     1440
acaactgggg gnagcaaaac taattacacc ctccggtata atagtttttg gtgtttcaat
                                                                     1500
gactgggagg aaaaggggtt ggaatttttt ttgctttggg ggtccctctt aaccttgtat
                                                                     1560
ttttaaggte tgggaeteae caaceeette ceettecaae cagagaaaae teaetgeagt
                                                                     1620
atctccttga aagtctggtg acgtgtctgt ctaagtgctg gtgagaggca caggaccaac
                                                                     1680
tgagggcctc acgcagtacc cctgggagtg gcttcttgag gccgtggaga gagagcatct
                                                                     1740
ctccccacgg catctgcggg tgagggcaag gtcctcacca gacaagtgca gctccaagtc
                                                                     1800
ccagatgttg ggctttttct tggtactgag acagcagtgg ggcaggacgg aacacagaga
                                                                     1860
agggtctgag gcctggagcg cgc
                                                                     1883
```

```
<210> 5690
<211> 1633
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (591)...(1277)
<223> similar to gi3874290 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5690
ggataaacat ctgtagcacg cttacgccaa gcttggcacg aggggagatt gacgcggcag
                                                                       60
tgcacacetg etggtacgag caaaagtage egacaggeca gagtttecag ttteggtgge
                                                                      120
ttcgtaggct tttagcttct gaaatccgct aaaagcggcg gttcattcat cttcaagtac
                                                                      180
ctagcctgac tggtagggct gctcagcatt ccgaaacatt tcgacctggg gagggggcg
                                                                      240
geggtgaaag aataetttet gtagagagtg ceeetegegt egeeeetget ttgaaggett
                                                                      300
tatgtattaa cggaatgccg aacatttgtg tcctacttgc tgacagcgca caggatcctt
                                                                      360
ctaacagtat ttctcaagta cttaacaaaa agatgaaaac ttgaaqtcca aqccqtqctq
                                                                      420
ctgattccgt ctcacagttt aaagactgtc cagaaacttt aagctttcaa aactgtacat
                                                                      480
tttaaaatcc tgtgcgttta tcttcatttt gctgggcaga aagccaaagt actggactgc
                                                                      540
ctggttcagg gctgaacgcc tagtacacct gctaacttgg agcttcagag ccatggcaac
                                                                      600
caaggagtca agagacgcca aagcacagtt ggccctctcc tcatcggcca atcagagcaa
                                                                      660
ggaagtgeet gaaaaeeeaa aetatgetet caaatgtaet ettgtgggae aeaeggaage
                                                                      720
agtgtcatca gttaagttta gtcctaatgg agaatggcta gcaagttctt ctgctgatag
                                                                      780
gctaatcata atttggggag catatgatgg aaaatatgag aaaacactct atggtcataa
                                                                      840
tttggaaata tcggatgttg cctggtcatc agattccagt cgtcttgttt ctgcctcaga
                                                                      900
tgataaaact ctaaaattat gggatgtgag atctggaaaa tgtttgaaaa cactgaaggg
                                                                      960
gcacagtaat tatgtettte gttgtaaett caatageatg tatattttae acaettteat
                                                                     1020
gaccattaat catctcctaa aactggggaa agctctctaa aacctcttaa gagtaacctt
                                                                     1080
atcogttace ctattecace aacctetttg teetttetg tttcaageaa etttgagata
                                                                     1140
ecgaettete tatggaaget taageegtag atgetaaaae aaacqtttqc teqttactee
                                                                     1200
cagcagagca ccggctttta aaggacctca acagacacgt ttcttaacct ttacgaaact
                                                                     1260
```

```
tttccagggg aaacttaaac caggaattt acaatctggc ataaattctg tcacccgccc 1320 cgtgactcca tcgccacaca tgccacctgg ctccacacca caacaaacag gagggagcgg 1380 aacccatgca aagcaggagc ttcccccgtt tccggcgtct gggtggatct acgttagctg 1440 ccgtttaggc agcttacgcg tcaggtgtgg gcctacgcct gcagctaagg taggcatccg 1500 caaatctagt ccttctctgt gacaatttcc aaaaagaaat ggtttttgaa acaacgatcc 1560 actgcttccc acactatcca gttaggtccg ggacagaccc tacccagcta atgcactcac 1620 ccaagaaggc agt
```

```
<210> 5691
<211> 821
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (649)...(776)
<223> similar to gi9453 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5691 ggcctctccg gaagcctgtg gcattcctgg cacctccaag ccatctgctc ttcagcctct 60 gggcccagga ctagactagt gctaaaatag ctgctcctgg gaggggctgg acccccaccg 120 tgggcagaga gggcctctgc tttttggggc aggaggggcc accctggcag ggtaaaaaga 180 gataaacaga aaaacaacag caacaataat agtaacaatc cggggttgtt gccatggggc 240 etgitetgaa caggetgege ceageteact gegaggaagg acgettagee aggeeetgge 300 tgaageetge agetgggetg gacacageag teattggeet gtgttgtggg ggaettggge 360 ctgccatggc tgcagtgggg accetgcctg agacagacag agctggggtg gtgaccaaca 420 ccgtcggggc accctcgcag gaactgggcc tggtgaactg cccagggacg gggaaggagc 480 agggtgaggc atggggaccc cgacacaggt tgagcagcgg gagaggaggc tgaggaggg 540 aaggaggggg cccgcagagt agcccccaga ccccaagtcc ggtcagggac aagcttgtta 600 gctccaggtt catgtcacaa cctgcagggc tcctaagttc aagctttttt aaacttaatg 660 ggcaaactga gacgcaacac aaataggctt ctgaccttgg tgtctgagtc ctggatctga 720 agteetteae ggeaeteaet gtgageeeet ettagaegea etgeaegaag tgagettgee 780 agetetteet ttaagaaaeg tgttaggeeg ggegeggtgg g 821

```
<210> 5692
<211> 2245
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (182)...(1677)
<223> similar to gi3881161 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5692
                                                                       60
aactteeqtq teqaegatee egeggggett ggeetetgee eggeeacaga geeggagetg
gaggtgetgt ecegtetgge ggegateece gggeagggee eggggeeggg gtttgaagat
                                                                      120
getgaacgte cetteccagt etttecegge ecceaggteg cageagegtg tegeeteegg
                                                                      180
                                                                      240
ggggcgtagc aaggtacctt taaaacaggg cagaagcctt atggattgga ttcgactgac
caaaagtgga aaggatctaa cgggattaaa aggcaggtta attgaagtaa ctgaagaaga
                                                                      300
acttaagaaa cacaacaaaa aagatgattg ttggatatgc ataagaggtt tcgtttataa
                                                                      360
tgtcagccct tatatggagt atcatcctgg tggagaagat gaactaatga gagcagcagg
                                                                      420
atcagatggt actgaacttt ttgatcaggt tcatcgttgg gtcaattatg aatccatget
                                                                      480
gaaagaatgc ctggttggca gaatggccat taaacctgct gttctgaaag actatcgtga
                                                                      540
ggaggaaaag aaagtettaa atggeatget teecaagage caagtgacag atacaettge
                                                                      600
caaagaaggt cctagttatc caagctatga ttggttccaa acagactctt tagtcaccat
                                                                      660
tggcatatat actaaacaga aggatatcaa tttagactca ataatagttg atcatcagaa
                                                                      720
                                                                      780
tgattccttt acagcagaaa caattattaa ggattgctta tatcttatac atattgggct
aagccatgag gttcaggaag atttttctgt gcgggttgtt gagagtgtgg gaaaaataga
                                                                      840
gattgttcta caaaaaaaag agaatacttc ttgggacttt cttggccatc ccctgaagaa
                                                                      900
tcataattca cttattccaa ggaaagatac aggtttgtac tacagaaagt gccagttaat
                                                                      960
ttccaaggaa gatgttactc atgatacgag gcttttctgt ttgatgctgc caccaagcac
                                                                     1020
teatetteaa gtgeceattg ggeaacatgt ttaceteaag etacetatta caggtacaga
                                                                     1080
aatagtaaag ccatatacac ctgtatctgg ttccttactc tcagagttca aggaaccagt
                                                                     1140
tetteceaac aataaataca tetaettttt gataaaaate tateeeactg gaetetteae
                                                                     1200
accagagett gategtette agattggaga ttttgtttet gtaagcagte etgagggeaa
                                                                     1260
ttttaaaata tccaagttcc aagaattaga agatctcttt ttgttggcag ctggaacagg
                                                                     1320
cttcacacca atggttaaaa tactgaatta tgctttgact gatataccca gtctcaggaa
                                                                     1380
agtgaagetg atgttettea ataaaacaga agatgatata atttggagaa gecaattgga
                                                                     1440
gaaattagca tttaaagata aaagactgga tgttgaattt gttctctcag cacctatttc
                                                                     1500
tgaatggaat ggcaaacagg gacatatttc accagctctt ctttctgaat ttttgaaaag
                                                                     1560
aaatttggac aaatccaaag ttctcgtctg catttgtgga ccagtgccat ttacagaaca
                                                                     1620
aggagtaagg ttgctgcatg atctcaactt ttccaaaaat gagatccata gttttacagc
                                                                     1680
ataatgaaga gotgtcattg tootttatto aactagttta totaaatttg tgattgotta
                                                                     1740
gggtttttta agagaacatt tttgtacata acaaaaggtt aactagaatc cagccttcag
                                                                     1800
tttcttaaat gaaatcaaat gttccttcag tacagggtaa cttcttgggc tttcttttgg
                                                                     1860
taccacact tatttttact actgatattt gacccgggaa agttaatcat ggcaacaaat
                                                                     1920
acatacagga ttctttgtta tgaatcacaa atttccttgc catttaaatt atatcactgt
                                                                     1980
tctacaataa gcacttgtgt tttatgacat gataaagtaa atgatcactt cgatcatgtt
                                                                     2040
totatgotgt aaaatgtott attagcaata cagattaaat tttacottgc actgttaact
                                                                     2100
caggaaatga tcatttatgt ccttgttatt aatgttaaaa catagaatgt tataacttat
                                                                     2160
taagtgatcc aaacattttt ttgtgtgtgt atggcattga tgcagaatag aataaaatta
                                                                     2220
tacttaagtt ctttttaaaa aaaaa
                                                                     2245
```

```
<210> 5693

<211> 630

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(631)

<223> n = a,t,c or g
```

<220> <221> misc feature <222> (361) ... (110) <223> similar to gi1345538 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5693 tttttttttt tttcctagag aagagacgaa ggtgattcag ggccgagcag ggctccctgg 60. gaageeeet etteetgeee caactttatt ttggttetag aateatteea gttggeatae 120 ccggtcccca ccacggctgt cctgggcaca cagttaacat gtcatgcagt tagggggagg 180 gagagagggg agagggcagg gggggagtca gtggcctgca ccgcacagcc actgggttag 240 aqaaagtegg ggteteccag getgeaaage ettgtecage catgtgtete etggeeetgg 300 getgacetee tgetgtggee atagggtaga eageetggee ttgggggetgg gecatggetg 360 tgtcaggtag ggaaagccac catcctgcct ccagtcccct gggcccttgt tctagcccct 420 cctccccca tatcactggg gataatttgt tggcctgggt ctccatagct caccagttat 480 ggaccaagga acaggggcag ccagcctgag ggtccatgct gtcacctgtg ggtggcccca 540 ccgagcagat gatcggacgc ctttcgaccg gnattccnnc cngncgncnt cgaggatctc 600 agggeteagg nnnneggeee eegtteeeee 630 <210> 5694 <211> 2069 <212> DNA <213> Homo sapiens <220> <221> misc feature <222> (325) . . . (1347) <223> similar to gi4104615 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5694 caaggagcac aggtcctcgt tcaggacgat gtaatccttg ccatcgtaag caagctggtg 60 ataccegegg agtaggegee egteegacee caegtegeag acagacatee tetagatggg 120 tgtgagaece tggeeeegee eeegeggeea geeeegeeea eegageeeeg eeetegeeag 180 gaccaacctg cggggatttt ggctgaaaat gaaaccgggt aacggctcct gggcctctcc 240 cgggtcaagg gtctccacgg tcccgctgcc tcggcgtgga tctcqqaccc aqaqactcqq 300 ggagacccgg gcggtccgtg ggggatgtgg aggggtagtg acctqcqccc ccqqccqtt 360 teacteacag geeteactet ggtttgtaag taageegete agggteegea agttteacte 420 ggtaaaactg tgctttggcc ttggcggttc cctgtctcct tcttcccaat attccggccc 480 ctcctgctcc atccacggcg cccgcggctc catcctggga ctcqtqqcqt cqctqtcqaq 540 cegeacgeae tgegtgtegt ceaegtegee caeggagagg aageggggat cegegegee 600 gggccgggac atggtggtgt ggaaatacct caaggagtgg aagcctggga gcaaggaggg 660

720

780

840

900

960

ggetgagace etecegacee tectecegge acegeaaceg ggtteetgeg ecceegeegg

geaggeeeet agetacteee cacagaegee gttteeetee egaceeegea eteacetgee

caggtctggg tcaggaccag ggcccccgag agcagcagaa gcagggttcg gggcgccatg

acaccatect eggegaetgg ggagaategg agteceggtg ggtgegtggg aactttagaa

ccgggaccgc ggctacattg attggcttct ctaggaaccc gacactcaat gggagtgaga

```
actggggcag cctggtgagt atccaggaag aaggacccga cacaggttgg gagagggaga
                                                                     1020
agagaaaccc tgcggagatg gggaatcccc agcgctgggc ctccccaatc catacaccgc
                                                                     1080
ctttggggcc tgagatcctg agagccatgc ctgaggccct gagagccatg cctgaggccc
                                                                     1140
tgggacttcg ccctgacccc gctacttctg tgccaagcgc tctgtctcaa cgtttccgag
                                                                     1200
tettggeeca ggagetgtet gagaaaccag ggagaaacce teggaatggg eecegteeet
                                                                     1260
ctctcttcac tttgcatcac ggaatccccg tcccagaact ggactccctg cctcctactc
                                                                     1320
cttacctgtc cccgtggact cttctagaag aaaaatcacc ccagggagct tgttgccaga
                                                                     1380
gagtgagett geeetgggaa tggaggtgta gagacagggt tttttgttgt tgttgtttgt
                                                                     1440
ttgtttttta aatctggaaa agttgtgcct gagtgcatga gatagaatag agaccagttt
                                                                     1500
getttttgtt tattaactae agtgggtage agaatettgg taacteetaa tgateaggaa
                                                                     1560
tctaatcggc caaaaatgtg actttggtcc cttgacatat aaatgtgtct aaaagcatta
                                                                     1620
caacaggaat cacaaagete ctaagtttea ettteecaga caatgtatet gtgacteecg
                                                                     1680
cttgtagtat tttaaattta ccttcattcc atagccctgg agtttctgtg tgagtccagg
                                                                     1740
acateteeta atacaaggta gecaetgtgt tactatatgt tgtaaccagg agecagtacg
                                                                     1800
gactttatte ateteacagt ggeaageact caatgeagte acaatgeece téaceagtge
                                                                     1860
teatgeactg cetgttttta ggaagtatee acttetaagt gttgtgtata ttttatatga
                                                                     1920
acacttagta ttttttaaac ctgattaaca taaaaaaatt agtttttagg cagacccaca
                                                                     1980
taaggtatta aaggccaact gcaaagatca ccctgcaagg ctctgtagat tgatgtatta
                                                                     2040
aaatatataa aacaatgtgt ttaaacctg
                                                                     2069
```

```
<210> 5695
<211> 1089
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (636)...(932)
<223> similar to gi1255991 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5695
taattgaaat cgtacagcgt tgcggaattc gcaggattaa tcacataagg agactgtttc
                                                                       60
atgcttgagg taaggagtgc ttagataaag tgagagaaat gggaatagaa agataggcac
                                                                      120
atacattttc caagaaagaa tgatctgaat tgagttattg attgaataca ggatataaag
                                                                      180
aagaaagtaa caaagaggac tgagtttttc aaccatgaca cctggaagga aaaatagcag
                                                                      240
agacagggaa aagagacaga gacaaggaaa aaaaaagaga cagagacaag aaaaccattt
                                                                      300
agggaataaa gtcttaagtc tggttttgga catattgagc tggagtagat ggcataaaat
                                                                      360
ctatcctcaa ggaaaagtga ctgttcttga acacagggag ccgtcctgat ctgtcatcct
                                                                      420
tettgaatet gtetagtget gaaagtaett actaetggae eetgttttet etgageagta
                                                                      480
taatatggct tctttactat taatctaaat ttgggctaat tttatatatt tttcaaaagg
                                                                      540
cattgatttt ttaaagagtt ttttaatcat taattcactc tggtaatata agtaatacct
                                                                      600
ttatatagtc atctaaactt tccaaagcac ttttacctat tattctcaga acagtccagg
                                                                      660
aaagtaggca aaacagacat tatcaccatt ttatgaggta ctggatgcta aatgacttgc
                                                                      720
tragregation ataactggta agtagragga traggatetga aatroattto acctggeett
                                                                      780
agatccatct ttgagggtct ctttatctga taggcttctc gtcttggata ggcaaaggaa
                                                                      840
ggatgaactg gagcagagga tgtcggccct gcaggagagc aggcgggagc tgatggtcca
                                                                      900
gctggaagag ctgatgaagt tgctgaaggt aagagcccgt ggcccacgct cagttcttgt
                                                                      960
cattettete ecaceacage etcagetget geetceagta aatttteatg ecacagagag
                                                                     1020
ttctttcatt ctgctgcttc aggaaactat tatgtacttt atcttctatc cattcctgag
                                                                     1080
```

```
<210> 5696
<211> 1596
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1392)...(946)
<223> similar to gi5102729 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5696
ctccggcggc gcgtcccccg agcttggtac ggctcagccc gtctcccccg aagccgcgcg
                                                                       60
ecegegeeeg egeceeteag teggtggage eegeageeee eettgtggee egeggeaget
                                                                      120
eccegeege teggeeegeg eccgeeatgg teegteegeg eegtgeeeeg tacegeteeg
                                                                      180
gegeeggggg ecceteggg ggtegeggge geeeteegeg geeetegtg gtgegegeeg
                                                                      240
teegetegeg eteetggeet gecageeeee gaggeeegea geeteegegg gateegggee
                                                                      300
egeteggece eteccatgga aggtgetegg gtettegggg caetgggtee categgtece
                                                                      360
tectcacetg ggeteaceet egggggtetg geegtgageg ageaeegget cageaacaag
                                                                     420
etgetggett ggageggegt cetegagtgg caggagaage geagaceeta etetgaetee
                                                                     480
actgcaaagc tgaagcggac cctgccctgc caagcctacg tgaaccaagg cgagaacctg
                                                                     540
gagacegace agtggeegea gaagetgate atgeagetga teeeteagea getgetgace
                                                                     600
accetgggee ecetgtteeg gaacteecag ttggeacagt tecaetteac caacagagae
                                                                     660
tgcgactcgc tcaaggggct ctgccgcatc atgggcaacg gcttcgcqqq ctqcatqctq
                                                                      720
ttcccccaca tctccccctg tgaggtgcgc gtgctcatgc tcctgtactc qtccaaqaaq
                                                                      780
aagatettea tgggeeteat eeectaegae cagagegget tegteagtge cateeggeag
                                                                     840
gtcatcacca, cccgcaagca ggcagtggga cctggtggtg tcaactcagg cccagtccag
                                                                      900
atcgtcaaca acaagtttct ggcatggagt ggtgtcatgg agtggcagga gcccaggcct
                                                                     960
gagcccaaca gteggteeaa gaggtggetg ceateceaeg tetaegtgaa eeaqqqqqaq
                                                                    1020
atectgagga eegageagtg gecaaggaag etgtacatge ageteatece geageagetg
                                                                    1080
ctgaccaccc tagtgccgct gttccggaac tcgcgcctgg tccagttcca cttcaccaag
                                                                    1140
gacctggaga cactgaagag cctgtgccgg atcatggaca atggcttcgc cggctgcgtg
                                                                    1200
cacttttcct acaaagcatc gtgtgagatc cgcgtgctta tgctcctgta ctcttcagag
                                                                    1260
aagaaaatet teattggeet cateeceeat gaecagggea aetttgteaa eggeateegg
cgtgtcattg ccaaccagca gcaggtcctg cagcggaacc tggagcagga gcaacagcaa
cgagggatgg gggggtagtg gttaccccgg gctgggcccc tccaggagtc acagatgagg
                                                                    1440
cccccgcaga gactggtgac acgcttctga gcaggggccc ctgggggactt caactgccca
                                                                    1500
gcaacatgga ggatggtgtc ctgaggcctc caaggacggt ccccacccct ctacgtttcc
                                                                    1560
ccaataaagc cttttaaaaa cctgccaaaa aaaaaa
                                                                    1596
```

```
<210> 5697
<211> 3681
<212> DNA
```

```
<220>
<221> misc_feature
<222> (936)...(2673)
<223> similar to gill96425 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5697
  cacttetgta atatgettee ceetgaacag ateteteet ecceetete caceccaaa
                                                                         60
  atgottaaaa ggtaacctga ctctttgttc tgggctcagt cctttggata ttaatctgac
                                                                        120
  tgggttggct ggtgcaccta aataatacat atatcctcct caaccccatc ggtctctctg
                                                                        180
  attcctaaat catccccaaa catttctggt ggcccatatg gggattggag ataacagatt
                                                                        240
: tactgtctcc tttgcccatg ggactagggc cctggggctg tggaagacct ggcatccaaq
                                                                        300
  geatgecatg ggggagttte acceggatgg agactggete teccegeate etgeceagea
                                                                        <sup>2</sup>360
  gtgcaactga acctgagatg gggctgcagg atgacaccag cacttcagga accgcggtgt
                                                                        420
  cacaccttgg attcaccata gctggctgaa actagcagca gcagtgactc ccgactatga
                                                                        480
  ccagtggatt aaccaacaag accetgattg ccccacccga atagacctac ggcgaatccc
                                                                        540
  aaccaccagt aagaaggaca actgccctgc tetgaccaca etggaggetg gteagtetac
                                                                        600
  acatggetga agettgaaga tettgeaage tettgetett agteacatee tggaagetga
                                                                        660
  ctagtctaca cacageegaa getaagagga ecatetetag ataagtaaat gtagataaaa
                                                                        720
  tttataagcc tagttataat tgttctgttg ttacattatt actgcaaatg ctgcaaatgt
                                                                        780
  ccatgcccag aggaaggttt gccattcctg tgtgtagtgt aagcatgttt ctattacata
                                                                        840
  cactaatgtt gttaccattt ctgcctatac tagaagggga gaaatctcta gaaggatgcc
                                                                        900
  cacactgtgt acatactacc tgggtaagga ataccatagt taaaactcta ctgtaccata
                                                                        960
  cctacagtac aggaaccaag ttaggaacct gcacatacaa ccagaccacc tattcggtct
                                                                       1020
  gtgacccagg aaataatcag ctatatgtat gttatgaccc taagctctta ccctatgaat
                                                                       1080
  tetggtttga aatacatatt aaateagagg gagaaaaaga aggagagtta tagetegaae
                                                                       1140
  aaaagaagcc cctccctcct gtaaagggcc tatttccttg tactttgatg cctgctatgc
                                                                       1200
  tgcatatgtt cacaatccta aaaaaaaacc agaagccagt ctgcaatggt gtaacacaag
                                                                       1260
 agaggettag caggageage cetaageate tgtacaaaga accacaaate ggatgeecag
                                                                       1320
  actgtaacat tcagtggtcc acactaacac aactccaata tttatattca ggaaggagtg
                                                                       1380
  ctctgctaag tagtatgtta accaaaccaa actgtaagac aagaacatgc aatcctttac
                                                                       1440
  attitactat ettaaageea gagataeett tetggtetae aggacagaea geaetataae
                                                                       1500
  gacttgatag actaggagca ggccttggag ttccactact aattgtcaaa aagactaaaa
                                                                       1560
  ggactcaaat gcatccaacc ccgcaattct gggtccataa tcattctata agcatttgga
                                                                       1620
  taagccagtg cctgagcttc ccccaccaac caaaaactta tttgctcaac tagctgaaaa
                                                                       1680
  catagctggc agcttaggaa tttcctcatg ctatgtacgt ggaggaacta atatggggaa
                                                                       1740
  ccagtggcca tgggaggcaa aggaattaat gccacaagat aacttcactt cgcttaaccc
                                                                       1800
  tgccagtgaa ccaacagcct cagccagtgt ttggttgtta aaaacctcca taattqqaaa
                                                                       1860
  gtaccgtatc gccgttggga aaggctttca cagaggcagt aggagaaata acctgcctag
                                                                       1920
  gcaacagtat tatgatgaga ctaaaaacaa aactctatgg agaagcaccc agaattactc
                                                                       1980
  ctacttacca gatecaaate etttatetee attetetace etaagecaca ettggeatea
                                                                       2040
  actagaggtt ccaaatgctt cgaaagcacc ctctggccta tattggatct gtggagcatg
                                                                       2100
  ggcatattgg caactgccag ctaaatggac aggagcatgt gtgtagtaac aatcaagcca
                                                                       2160
  ttcttctttc taattcctct aaagcaaggg gaactcttat ggtatccagt tgatgatgaa
                                                                       2220
  aataaaagaa gaactagaag agcataatca caaaaataga cacaaatgtc aaaaaggatg
                                                                       2280
  tggacatagg agactggaaa gataatgaat ggcctcctga aagaataatt aaatattatt
                                                                       2340
  ggccagctac ctgggtgcaa gatgggtcat ggggttacca caccccaatc tatatgctca
                                                                       2400
  actgcatcat aaggttgcag gcagtctttg aaattataac caatgaaaca tcaagggcac
                                                                       2460
  tagatttatt ggcaatacaa gcaacacaaa tgagaaatgc tatatattga aatagattgg
                                                                       2520
  cattagatta tcacttagcc tctgaaggaa gagtatgtgg aaaatttaat ttaaccaact
                                                                       2580
  gttgcctaga aattgctaat aatggccggg ttgtcatgga aatcagagct agaatgcaca
                                                                       2640
  agttggccca tgttccaatt cagacttggt cctaatggtc cctggattct ttgtttggag
                                                                       2700
  gatggttctc aacctttgga ggattcaaaa ccctcactgg tgggtttttg tttattcttg
                                                                       2760
```

```
gcatctqcct catcctccct taccttttac ccctgtttat taggaggatt cagtcaacta
                                                                     2820
tagaggcagt aataactcaa cacactaccg cacagttgat ggcattaacc aaatatcagc
                                                                     2880
cactgccagt agaagaagct cagctctgtg aagaggtggc aaatagtggt gctttctatt
                                                                     2940
                                                                     3000
aacacctttg ttataaaaag caacaaaggg gggaaatgga acaggaatta aaagaaatta
aagaatgcat aagcaaaaac tcaattgtat gtagggaaac ccaattcctc ctgaggaaga
                                                                     3060
gaaagaggtg gagtccttta aaaattcact gcctgttttt ccgtctgtag ctagtgagcc
                                                                     3120
ttatetetee ettteecagg cattgtgaag accetgttte tecagetgtg cagetgeatg
                                                                     3180
gtcactagac agataaactc aagttgtaaa acatgttttt ccttgaaaag taagaaatga
                                                                     3240
tgtaatacat gtctcaactg aataactgtc tttgtttctc acttctgtag taagcttccc
                                                                     3300
cctgcacaga tctcccctct caccccatga aatgcttaaa aggtaacctg actctttgtt
                                                                     3360
cagggeteag teetttggat gttaatetga etgggetggt geacetaaat aataaatate
                                                                     3420
tecetgaact ceateagiet etetgattee ttaaaaatee egetacattt tgtgtaatga
                                                                     3480
actggcaaca agagaaagtt ggtcgaagaa aggcagagga actgtgtctt gtaagaatta
                                                                     3540
gaatcgaggg gctccataat catctggcat ccgttcaatg ttgtatctat ggttagaaat
                                                                     3600
gtacatgata ggaactccag gaatcttacg gattcttctt ttcaggtccc ggtcaactgt
                                                                     3660
ggccacaatg taacactttc c
                                                                     3681
```

```
<210> 5698
<211> 2004
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (86)...(933)
<223> similar to gi2072957 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5698
agtitticaac gictatitica ticccigcti cagaggacci cittaatcii iqattitiggi
                                                                       60
ccctgtttct aagaaaagca actgaaaagg tcgtaatacc gcccctgaga aaaaaggagc
                                                                      120
agegetääät aategagaaa atgeeteete tigaaaegga tatagagatg gaaacaagat
                                                                      180
ataagaagga tigagaatca tataatacag gagcitaaac acctatgcgc gatgataaag
                                                                      240
agggtactat tagagcgctt ggaaaatacc aggaagttga gagagttaac agaagggcgc
                                                                      300
acgctggatt ggccacaaaa tcgaattact gaagtaagtg caaaacgaca aattgtcaca
                                                                      360.
gaatacagag aaaaggggaa aagaaattaa gaggagaaaa agagagatct agagggccgg
                                                                      420
tccaggagat acaatctatg cataatagga atacctgaaa ctgaggacag agcaagtgga
                                                                      480
gctgaaacaa taaaggatct acttgaaaaa attttccaga attgaagaac gaactagatc
                                                                      540
tacaaatgga aaaggctcat aggatacctt taaagtttaa tgaaaagaaa gcagcatcta
                                                                      600
gacatateeg ggtgaegttt ttgaatttea aagaegaaae attttacaag cateeagtea
                                                                      660
gagaaagcag gttacttaca aaggggcaaa agtcaggctg acctcagatt tttctcctgc
                                                                      720
aattotaaat gocagaagao agtggaacaa tatotagagt gttaagggaa aataattttg
                                                                      780.
agccaagaat tatatactet gecaagttat catttettta caaaggaaac tggaagacat
                                                                      840
tettagatat acaggggtta ggaaagtata teaaceaaga aettteeetg aaaattttge
                                                                      900
tgaaggattt actgcagcta acagagaacc tgaattaaaa taagaatagg gaggcaattg
                                                                      960
tatgaaagaa ctgatggtat gcattaaaac tagttaagga gcattaagtt taaattgtta
                                                                     1020
tgtatagggc attaaaacta aatacaaaaa tagaaacata agctgggtgt aaaatttcag
                                                                     1080
tttacgttta aactggaagg gcataccaca tgttcaatat attggacaaa tactgtttta
                                                                     1140
tttttagcat gtagtattgt agatacaaat acgcatgttc ttaaqctaaa cctaaqtaaa
                                                                     1200
agggettigt cactgtagat tigacaaata acattetaaa igteaaatet gacaatigga
                                                                     1260
```

```
aaacaqtaca qttttatttc ccttattttt aagtatagca ggaaaaaaat aacaagtttg
                                                                     1320
tecatgttae taetgataet gtaaagaaad ttecaaatea etggtttggg agggggtgga
                                                                     1380
tacatcctca ttttctgtac atgatgcatg gggaaaaaca gtagttactg catcatatag
                                                                     1440
ttccaagtaa atcatatagt tccaagtaaa tttgacatgg aaataagtgt taactacaaa
                                                                     1500
aataqaatat atacattcca atqtttqqaa aaqaagtqqt aaaaagaaaa atagcaaaaa
gacactaaaa ttagcaaaaa gtagattgac agtacagatg acctataaac tggttaaata
                                                                     1620
gecetattae aattgaaatt gggteaaaaa teaateteta aeetgagata eatttgtata
                                                                     1680
aaacaaatga tcaaagagtt taaagataat ggaaactata aatcatagaa atagcaacat
                                                                     1740
ttttcttaaa atctaaacat aagacatttt atgtaaaaca tacaatatag gatgtaacat
                                                                     1800
ttaacaaact atatggtaaa taatatgaca ttaatatata aaatatatgt tccagatctt
                                                                     1860
gatgtgggtg atagttttac ttatgtacat cgatatacat ctatttaaaa acatgtacat
                                                                     1920
ttaaattgtt gcattttatg tatttaaaat ttattgagta atccttctgt atgtattatt
                                                                     1980
aaagagaata tagcaaaaaa aaaa
                                                                     2004
```

```
<210> 5699
<211> 2789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (545)...(2356)
<223> similar to gi4959382 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5699
ctggggaege taggtteegg aacetgaeet gagetgggge etgtgettee agegggtggt
                                                                       60
ggggggcetg gtgtgetgge atcaagtaag cegaetaeet eggeaaagge ttagggaeaa
                                                                      120
gagaccagca geetgaaetg getggggeat eeggaagget tagatettgt ggeeaagagt
                                                                      180
teagacegtg gegaagtgga gagtgacatg cagttggatg geggtgactg egtggteetg
                                                                      240
caaccetggt tecagtetgg caagcattgt agacetgget getgaagaet gaeggggeee
                                                                      300
agggtccgct gccccaccg ccatcaccac ctcggaaccc agggtaacgc tgtcagtctt
                                                                      360
tggaccaacc tcgctgtgcc taacaagaat tccagaagtc acccatccga aaggcactgg
                                                                      420
cocatgacae tetecaette caatettaaa tettttaett catacettgt etcagatete
                                                                      480
tectggtade cettececae gecettagat aatecatete aattecteat getaattgag
                                                                     540
gagetátáge tgeaaggeae ettecaggat tteacaceta cacaaatete etttttetee
                                                                      600
ttttgccttc tctgcttatg ggatattctg agtccccacc cccaatcact gacagctggg
                                                                      660
eccepticat cageoteaca caccaegtat taagteagte acaateteee etetecteta
                                                                      720
actgctggat ttgtctttct acacacaccc aatgattcac ggctcttccg gctgacctac
                                                                      780
ttacatggac acagtccaac gtgagcttac acatttetta ettggetata ecattettgg
                                                                      840
ctgatteatt ectgaaaceg gtteataace tggaaactea getaaacace ttteetteaa
                                                                      900
acteagetet eteageatgg ttteaggtag ggetgttgee eteetteace taatagette
                                                                      960
tggactaaca tccatacaaa ccaacacagc atcatctaaa ccaccaatat gggggtacca
                                                                     1020
tttetaetea aaetteette atateeeeae eeceettatg teteageega aeetaeeeta
                                                                     1080
atccagecca egecacaatg gtgggacagg tteeccagte ectatgtggg ettattttta
                                                                     1140
cccttgcact ccctgtagac catcaattct acaccctaat tacaaaatca tatccacctc
                                                                     1200
tgcctggcag aaggtgttat gcttttctgg ctcgcctacc atccacacat ccctacacct
                                                                     1260
caccaccgga tectetite ttteetteea tecaatteet ggetteeceg etgecaacte
                                                                     1320
tgctctctat gtctccagtt taaaggggcc ccctggaaaa aatgtaacaa ttccctcacc
                                                                    1380
tgtgactggt acctgacage caccacaceg gggcagcaat ggctaacggt tgacaaagac
                                                                     1440
```

```
aatttette teteteeaaa accaaacage etteateaac teeetageea agaeteeeta
                                                                     1500
traggerett araggtgreg etetggetgg ragttarera atttgggaaa argaaaatar
                                                                     1560
cetateatgg etacetacet teacetacaa ettetgeetg tecacececa gtetettett
                                                                     1620
tttgtgtgat acaaactgat atctttgcct accagccaac tggtcaggaa cttgcaccct
                                                                     1680
ggtctttcag gctccaacca tcaacatcct accccctaac caaactattc taatttctgt
                                                                     1740
agaagcetet ateteetett cacccataag aaataaatgg getetacate teateaceet
                                                                     1800
gctaacagga ttaggcatca ctgctgcact tggcactgga atagcaggca taaccacctc
                                                                     1860
aatcacctca taccaaacac tattcacaac cctttctaac accgtagaag atatgcacac
                                                                     1920
ttccattacc agtctccaac gacaattaga cttcctcgtg ggagtcatcc ttcaaaactg
                                                                     1980
gagagtectg gacetectaa eeactgagaa agggggtace tgcatatace tecaggaaga
                                                                     2040
atgetgttte tgtgttaatg aatetggeat tgtteatate geagttegta ggetteatga
                                                                     2100
cagggetgea gagetttgae atcaagtege tgacteetgg tggeaaggat catecettet
                                                                     2160
aagatggata ccctgggttg ccccttcct aggacccctg atcttcctct tcctgttact
                                                                     2220
aatgattggg ccatgcatat ttaaccttqt atcccqcttc atttcccaaa qqctqaattq
                                                                     2280
ttttatccag gcaagcatgc aaaaacacat tgataatata tttcaccttt gccacgtcta
                                                                     2340
ataccagage ctacgaggaa accattegga agetecagaa eccaggeeet aateacaaeg
                                                                     2400
cccctatcca gcaggaagca gccagatgat caacgacgcc ctttttcctt tttatactaa
                                                                     2460
agtaagaaat aagaatgtta gcccaaactg cactattttg cagaccccta ccattttaca
                                                                     2520
aactggtcag agtggaaaat tccaccaggg cctgagctgt gagaaacatc ctgtcaggca
                                                                     2580
ggtcccaggc ctaacccctg gctgcactaa attccttcat tatcagcagc caaacacacc
                                                                     2640
geoceacce cattiticaea acaateecag acctetectg edegggaetg taactggtee
                                                                     2700
agectgtaag egggaagggg getetggeae tagetggtae ecceteteeg eaggtettte
                                                                     2760
tcccaataaa tctgtgttgc cattgaaaa
                                                                     2789
```

```
<210> 5700
<211> 1726
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1162)...(774)

<223> similar to gi3002527 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5700
gagttttttt tttttttt tttaaaatta agacaagttt attgagtaaa aaaatgcata
                                                                       60
cattggaacg gcaaaacatc aataaggccc taaaacaaaa aatacagtta tgctttaaca
                                                                      120
aattettage aatgtggeee aegettttta aaaaattgae gtgttggeag tgttggttag
                                                                      180
gaacactgac gtacatccca aatagtaata aattcagtat gaaattatac gcataacctt
                                                                      240
actcaccata ctactttttc tcccaaacta ttgtgacttc tttttgctct ctgattaaaa
                                                                      300
caaacaggta acateettac acetttgete cateeettgg getttaaaaa gaatggetgt
                                                                      360
agttagtttt gattcactat atactctctg tacttgagga agagtaagct gtgtttaaaa
                                                                      420
gtgccctttt ccatgtcgtc atgtaccaat accctctgca tttcaaaatg ttgactcaga
                                                                      480
tgtttttccc tctacagaac tagaaaattg tccccccact ttggtctatt tactcatttg
                                                                      540
aagacaaaca gggttactaa gagttttaca taagttattt ctttagagtg acgaagtgtt
                                                                      600
agtttacttc ttgcttagtg gagacaaaaa ttgtgagata aagaggaagg aataggatgt
                                                                      660
acacatttac ccatcaatat agcacccagt gttatttgag caggaccctt ctqttaqcat
                                                                      720
ctaaggtaag gttaggacag tcaagataaa atactggatg ttggccagga gcagtggctc
                                                                      780
aagcctgtaa tcccagcact ttgggaggct gaggcaggca gatcatgagg tcaggagatc
                                                                      840
```

```
aagaccatcc tggctaacac agtgaaaccc tgtctctact aaaaatacaa aaagttagtt
                                                                      900
agttagttag ccaqqcqtqq tqqtqqqtqc ctqtaqtccc agccattcgq qaqqttqaqq
                                                                      960
caggagaatg gtgtgaacct gggaggcaga gcttgcagtg agattgcácc actgtactcc
                                                                     1020
agettgggeg acagagegag actecatete caaaaaaaaa caaaaaaaca acaacaaaaa
                                                                     1080
aaaaacactg tatgttaagg gagactcett cagtatetaa gagcacttgg gggtggactg
                                                                     1140
ggggagaagg gatgacttca tttaccccca tagttatgga gtcttgagtt ctaagaaaat
                                                                     1200
tttcatccct attgattttt atgctaaaaa cagaatctta caaatgtgat agctatatat
                                                                     1260
ccaaatgagg tggtctagta caagcatttc tgaaaaaatt tttgaatgac aaaattttat
                                                                     1320
cctaagcgat atgttttcca agtgaatata attctagttt aacacaacat tgcaagtcag
                                                                     1380
gtgtgcacat tttactaaca aacatatatc caatgtgatt tccagggcct tctcccagaa
                                                                     1440
gcaaaaggag ttggaaagta gtctcctgcc tttagctgaa aatcaagaag agagttttgg
                                                                     1500
ttcttcattt taaatgtaga aaatcaaatc cttcacattt gatttgtggt cttcccaatt
                                                                     1560
attaaaaatg tgctcactgg ctcaactgta tttttcaaat agcctagatt tacttatttt
                                                                     1620
tttaaatgot cattaaaaac ttgtatacta tgtagtaaaa tgctgtactt gttctataca
                                                                     1680
ataaaacaga tacttctttt gtaaaagctt agtagtaaaa aaaaaa
                                                                     1726
```

```
<210> 5701
<211> 1127
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (163)...(962)
<223> similar to gi3287681 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5701
aaaaagegee ggeaattggg gtegeagetg gagatgetge ggeeggeagg getetggege
                                                                       60
ttatgtcggc gaccttgggc ggcgagggtc ccagcggaga atcttggccg tagggaagtc
                                                                      120
acctetggtg teteteceeg eggtageace tegeceagaa ecetgaatat tittegacegg
                                                                      180
gatttgaaaa ggaaacagaa gaactgggca gcccggcagc ccgagccgac caaatttgac
                                                                      240
tacctgaagg aggaggttgg aagtcggatc gcagaccgtg tatatgacat acccagaaat
                                                                      300
ttcccccttg ctttggatct tggttgtgga agaggttaca ttgcacaata tttgaataag
                                                                      360
cttcagttat tccattgcag gaaactattg gaaagttttt ccaagctgac attgcagaaa
                                                                      420
atgetttgaa aaatteetea gaaacagaaa taeetaetgt cagegtttta getgatgaag
                                                                      480
aatteettee etteaaagaa aataeatttg aeetggtggt tageagttta agtttgeatt
                                                                      540
gggtgaatga ccttcctaga gcacttgagc agattcatta tattttaaaa ccagatggag
                                                                      600
tgtttatcgg tgcaatgttt ggaggcgaca cactctatga acttcggtgt tccttacagt
                                                                      660
tagoggaaac ggaaagggaa ggaggatttt otocacacat ttotoottto actgotgtoa
                                                                      720
atgacctggg acatctgctt gggagagctg gctttaatac tctgactgtg gacactgatg
                                                                      780
aaattcaagt taactatcct ggaatgtttg aattgatgga agatttacaa ggtatgggtg
                                                                      840
agagtaactg tgcttggaat agaaaagccc tgctgcatcg agacacaatg ctggcagctg
                                                                      900
cggcagtgta cagagaaatg tacagaaatg aagatggttc agtacctgct acataccaga
                                                                      960
tctattacat gataggatgg aaatatcatg agtcacaggc aagaccagct gaaagaggtt
                                                                     1020
ccgcaactgt gtcatttgga gagctaggaa aaataaacaa ccttatgcca ccggggaaaa
                                                                     1080
aatcacaata aatatttatt cagtgtaaaa aaaaaaaaa gggcggc
                                                                     1127
```

```
<210> 5702
<211> 1940
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1255)...(1671)
<223> similar to gi186800 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5702
gtgcaattca tcgagacgtg ctggcctatc tggccgaggc ctggggcatg gacatcgagg
                                                                       60
ccaccaaccg agactactag eggeetetge aegaggegge etecatggge caccgagact
                                                                      120
gcgtgcgcta cctgctgggc cggggggcag cggtcgactg cctgaagaag gccgactggg
                                                                      180
tectcacaga aggeacagag gttgeeggte aaagetgttt teetgeetge cagaceeetg
                                                                      240 -
aateetetag gtttteeate tgtgeeaagg atgtgtgtgt tttgaagaee tggeeeetgg
                                                                      300
ettetaatgt eteagetgee teeatetgae agetteteet ggttggeett aggaeteete
                                                                      360
tgatgatggc ctgcacaagg aagaacctgg gggtgatcca ggagctggtg gaacatggcg
                                                                      420
ccaatccact cctgaagaac aaagatggct ggaacagttt ccacattgcc agtcgagaag
                                                                      480.
gegaccetet gatectecag tacetgetea etgtttgece aggtgeetgg aagacagaga
                                                                      540
gcaaaattag aaggacteet etgeataetg cageaatgea tggeeatttg gaggeagtea
                                                                      600
aggtgcttct taagaggtgc caatatgaac cagactacag agacaactgt ggcgtcaccg
                                                                      660
cettgatgga egcaatecag tgtggteaca tegaegtege taggetgete etegatgaae
                                                                      720
atggggcttg cctttcagca gaagacagcc tgggtgccca ggctctgcac agggcagctg
                                                                      780
tcacagggca ggacgaagcc atccgattct tggtctctga acttggcgtc gatgtagatg
                                                                      840
tgagagecae atcaacecae etcacageae tteattatge agetaaggaa ggacatacaa
                                                                      900
gtacaattca gactetetta teettgggag etgacateaa ttetaaagat qaaaaaaate
                                                                      960
gatcagecet geatetggee tgtgeaggte ageaettgge etgtgeeaag ttteteetge
                                                                     1020
agtogggact gaaggattot gaagacatca cgggcaccct ggctcagcag ctcccaagga
                                                                     1080
gagcagatgt ccttcggggc tctggccata gcgcaatgac ataaggatgt ttccaagagg
                                                                     1140
aggcaataaa gtgcatgagt tgctgggagc ctgagcacct ttcgtttttc ggctcagaga
                                                                     1200
aagccaagtg caacttgctt cagtcatcct gaacctgagt tcaaccaacc gcagccacct
                                                                     1260
acgtttgacc ccagcgagat caaagttgta tatctgaggt gtaccagtgg tgaagtcagt
                                                                     1320
gecacatetg caetggeece caaggteage teeetgggte tgtetecaaa aatggttget
                                                                     1380
gatgacatca ccaaccattg actggaagag tctgaggatg atagtgaaac tgaccagcca
                                                                     1440
cagcagacag geocagattg aggtggtgee ttetgeetet geoctgateg teacaaceet
                                                                     1500
caggaaccac cgacagaaag aaagaaacac aaaaacatga aacacagtgg tagcaccact
                                                                     1560
tetgatgaga tigicaacat igeetaacag aigeageage agietitage cagagaacte
                                                                     1620
tetggaacca ttaaagaatt cetgggggee ggttgeggtg geteatgeet gtagteecag
                                                                     1680
cactttggga ggccgaggcg ggaggatcat gaggtcagga gatcqagacc atcctqqcta
                                                                     1740
gcgtggtgaa accccgtctc ttactaaaaa tacaaaaaaa ttaqccaqqc atqqtqq
                                                                     1800
gegeetgtag teecagetae teaggagget gaggeaggag aatgetgtga accetqqaqq
                                                                     1860
cagagettge agtgageega atatgegeea etgeaeteea geetgggeaa cagageaaga
                                                                     1920
ctccgtctcc aaaaaaaaa
                                                                     1940
```

<210> 5703 <211> 1512

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (922)...(682)
<223> similar to gil710216 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5703
ttttaattac aaaaaaaatt ttattattac aaaacataca atctcacaaa ggtacaattt
                                                                       60
gaaatacggg gacacccttc taactaccac ccaggtgaag aaacagaact ttgtcaggca
                                                                      120
ccccagaacc cctccaagtg cctcatcaca atgacaactc cttccctcta qaaqtaqcca
                                                                      180
ttattettgt atagtactga etgtgtttet ttatggtttt atettatttt ttagagacag
                                                                      240
ggtcttgttc tgtcacacaa gaacaagtgg acaggtggag tgcagtggtg ttcatagctc
                                                                      300
actgcaatct tgagctcetg ggctcaggtg atcttectgt cttagcctec caaggtgctg
                                                                      360
ggattatagg cgtgtgtcat tgcacttgac ctagttttat ttttttttg agatggggtc
                                                                      420
ttgctctgtc acccaggtgt tgcccaggct tgagtgcagt ggcgcgatct cagctcactq
                                                                      480
caaceteege eteceaggit caegeaatte teetgeeteg geeteeegag tagetgggat
                                                                      540
tacaggtgcc cgccaccatg cctggctaat tttttgtatt tttagtagag acggggtttc
                                                                      600
accatgitgg ccaggetggt cicaaactec tgaceteaag tgateegeee geeteggeet
                                                                      660
cccaaagtgc tgggattaca gatgtgaggc accgtccacc gtgcccggcc gagttttatt
                                                                      720
cttgaatcgt gcatgtctct gttcactaca gtttagtgca ccatttaaat aaatttgttg
                                                                      780
tettttaagt teateaaaa tatttettt gaageactat aataatgetg gtgatggaac
                                                                      840
tegecaccat tattecetgg gagettetgg cagattetgt cagttggaat etetaattet
                                                                      900
tttctcagtg gaccttttta cttgactccc acagttcttt aagtagcttc ttttttcca
                                                                      960
gggtttcctt tgctcttttt ttcctttctt gtttttctt cgccqcttct cqtttttctt
                                                                     1020
tgtgaacagg actgttttca ccattgtaga aaacatctac tttctcttqt aqqattttcc
                                                                     1080
gagetagett tetgttetga teaactgate ttgtetgatg geaetttaea acgatgeetg
                                                                     1140
aggggatgtg cttcagcacc acgcagttgc tggttttgtt ggttgcctgg ccccctggac
                                                                     1200
cgtgtccttt cacaaactgc tcttcgagtt cattctcatc caaggaaagc agtgcagggt
                                                                     1260
agtecttett geetgeeate tggaeeggag tgaeagetat teetggggat aacaaegtea
                                                                     1320
gettetecca aageeggagt ecceatggeg eegggeatat tegggteagt ggtgtaggaa
                                                                     1380
aatgaaataa acccacggtg ctcataagga acgtggctct gctggctgag gacctggtct
                                                                     1440
caggaccega ctegtgeeet caaegtteta gggatateea aateacetea geggaggatt
                                                                    1500
cgcaatcgcg at
                                                                     1512
```

```
<210> 5704
<211> 963
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (212)...(916)
<223> similar to gil542885 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5704 ttttttttt ttgccgctgt caacagacag tttattctat atacaaacac aattttgtac 60 actgcaatta aatagaatgg aatgagcgct cctccgcatt cctccccgag tgactggttt 120 ggccgccggc ccactccatc cccgagtggg actggaccac ggccctggct gctgccactg 180 atgttggege etgeacecca egteeetatg eeegaggege aagetetget eteeegggga 240 ceceaggeet ggegeacaeg eggggaggge ggggeeatgg agaaggeaet geagggagea 300 ccaggcagag ccgggctgag gccggccggc actagggcgc gaggccccac cccaagccgg 360 ectetectee acaceteege ettgeteaga gacetgeace atgggacece actecateet 420 480 caggacggtt cactgcagac ctaccaagac ccctccagaa ccttccgcgg aaccccaccc ceteteettg etgaceaget caaacacete actagegggt acaageeteg ggegegacet 540 600 cacaccaggg ggaggaaagc cgccttccgg gcaaacccca cgaaaccctg aaagcccccg 660 acacaggetg ggcagteeca gaggaaggag gtggetggee teececacee ecaegggete gggaaggtca ggcccagcca gcaggggtca gaggcggctc agctgtgcgg ctcaggaccc 720 cacctccgag ggcgcctccg ttggggccat ggaggccggg ctaggcccgc ctaccgcagc 780 ccccagggga gttgtgtcag aagctgcgga gtcactcggg gggacactgt cctggggggc 840 gtgggggagg ccccagcag ggcccagcgg gctggctgga cgccgctcca ggagggaggc 900 getcaggecg gacaggaagg aggegtetgt gatgatggea geggtetetg ceatecaace 960 963

```
<210> 5705
<211> 1521
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (156)...(95)
<223> similar to gi180279 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5705 tttgagatgt atttcccaga aaagcaacat gatgaaaatg gtcagaaaag gcaatttcct 60 tectetttte taatttgget etggageeae cageagaace tetteaatat ettgeatgtt 120 acagatttca ctgctcccac cagcttggag acaacatgtg gttcttgaca actctgctcc 180 tttgggttcc agttgatggg caagtggtag acaccacaaa ggcagtgatc actttgcagc 240 ctccatgggt cagcgtgttc caagaggaaa ccgtaacctt gcactgtgag gtgctccatc 300 tgcctgggag cagctctaca cagtggtttc tcaatggcac agccactcag acctcgaccc 360 ccagctacag aatcacctct gccagtgtca atgacagtgg tgaatacagg tgccagagag 420 gteteteagg gegaagtgae eccatacage tggaaateea cagaggetgg etactactge 480 aggtetecag cagagtette aeggaaggag aacetetgge ettgaggtgt catgegtgga 540 aggataagct ggtgtacaat gtgctttact atcgaaatgg caaagccttt aagtttttcc 600 actggaattc taacctcacc attctgaaaa ccaacataag tcacaatggc acctaccatt 660 gctcaggcat gggaaagcat cgctacacat cagcaggaat atctgtcact gtgaaagagc 720 tatttccagc tccagtgctg aatgcatctg tgacatcccc actcctggag gggaatctgg 780 tcaccctgag ctgtgaaaca aagttgctct tgcagaggcc tggtttgcag ctttacttct 840 cettetacat gggcagcaag accetgegag geagagacae atcetetgaa taccaaatae 900 taactgctag aagagaagac tctggggtta tactggtgcg aggcttgcca cagaggatgg 960 aaatgteett aagegeagee etgagttgga getteaagtg ettggeetee agttaceaae 1020 teetgtetgg ttteatgtee ttttetatet ggeeagtggg aataatgttt ttagtgaaca 1080

```
cttgttctct qqqtqacaat acqtaaaaga actgaaaaga aagaaaaagt gggaatttag
                                                                     1140
aattetettt qqattetggt catqaaaaga aggtaattte ceageettea agaagacaga
                                                                     1200
catttagaag aagagctgaa atgtcaggaa caaaaagaag aacagctgca ggaaggggtg
                                                                     1260
caccggaagt gtaccctagg gggccacgta gcagcggctc agtgggtggc catcgatctg
                                                                     1320
gaccgtcccc tqcccacttg ctccccgtga gcactgcgta caaacatcca aaagttcaac
                                                                     1380
aacaccagaa ctqtqtgtct catqgtatgt aactcttaaa gcaaataaat gaactqactt
                                                                     1440
caactgggat acatttggaa atgtggtcat caaagatgac ttgaaatgag gcctactcta
                                                                     1500
aagaattctt qaaaaactta c
                                                                     1521
```

```
<210> 5706
<211> 789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)...(648)
<223> similar to gi208157 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5706 aggcagccac tttctagaga cagttagctt cattggacta atctggggaa tctgaagttc 60 aaggacetea ecctgitact aatgitgeta acticetete caccietqti taiqatteet 120 ctgcgtgtaa acagagcagc tccacccagc tccacactcc aqctaccaga qaaqcctctq 180 gaacaaacat ggaatateet tacceette accaagacee tacetgtete caateteage 240 agaaaagtaa caagctgggc cggggtgggg atcccggtga catgtctacc agaqqcaqqa 300 ageggagggg agaggagage agagtgtggg etgggggtee caaccactaq qqqaccccc 360 agaagtcagc atcattcggg agcctgaggc gctgggaatt ccaaggcctg gccagaaagc 420 cccagtetaa gggacgcate ccagtececa gggagececa atetaaggga tacagececa 480 tectcaggga gececagtet gagggagaca cagactegte etcagggagg eccagtetaa 540 gggacacago cocatoctoa gggagotoca atotaaggga tacagocotg tootcaggga 600 gececagtet gaagggagae teagtgetet ceteagggag ecceegtetg gateagggaa 660 ggagctctgt ttccctgtgg aggtgactgc tcaggaggaa agtccttttc catggcactc 720 cetgaettee cettecettt eteteetgea gecageaggg etecageggg ggageggttg 780 tctttgggg 789

```
<210> 5707

<211> 1045

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1046)

<223> n = a,t,c or g
```

```
<223> similar to gi200545 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5707
etggeeccag gettteecae atggaaggtg getgeatgee aaggggagga gegacacete
                                                                      - 60
caggetteeg ggageecaga gageatgtgg caggeagtgg ggeetettea teageageet
                                                                      120
gcctggctgg ctcccttggc tgtgggcagg tagcacgcct gctggcagag gtacctggtg
                                                                      180
getgeeetgt tegeateagt ggegatgaet ttatttgegg ageatttetg caagegttge
                                                                      240
ctggatgcgg tggtgcattg tgggccctct gggctcctgc ctcagaatgt cagtgagcac
                                                                      300
catgctggag gtcacccagc actgtggcag cgcccaggag ggcatagggc agcctaccac
                                                                      360
ctccaagggg gcaggcgccc tcatctgggg ttgggtctgt gctgagctgg agggcctcta
                                                                      420
gggaaccgtg gggcagggtg gccagctgct ggctcccaga gcgcagccca ggcgtcctca
                                                                      480
acggggagec ccaaatgtec acgeccagaa caacagttgg caggacaggt gtgacacage
                                                                      540
cacagcagag gcaaggggtg ccaggagtcc ccagcggcat cctcggggag atgctggtga
                                                                      600
ggggtccgta cagggtgggg tccccacccc tagcccctta ctgagggggg agtgcagcag
                                                                      660
ttggcctgct tgtctggcgg agaaagccag ctccctgcac cctcggggct gagtcagatc
                                                                      720
tgggtctgcc gcaaaggcct tgcctagacc aggtcacact gatgccctgg tttccctatc
                                                                      780
tgtaaaatgg ggccaatgac acctacctca ctgggtcacc atcgagatca atccttctcc
                                                                      840
etgeccegae acetegggea categeatge acteagagea cagageeggg cagaegeage
                                                                      900
acctgcatgg ggagcccagt gcccggcaca gcacaggggc tttcagggag gccacgcagg
                                                                      960
gccgtggggc tgaaccacgc tetegttttg tcaggcagct atgcagnage tetteettgg
                                                                     1020
tattgggttg ttntggtttt gtatt
                                                                     1045
     <210> 5708
     <211> 928
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (778)...(446)
     <223> similar to gi4927776 in the genepept database release 114
       Run with FASTXY 3.3t00, default parameters
     <400> 5708 .
ttttttttt ttgcgtgagc aataaagctt tttaatcacc taggtgcagg caggctgagt
                                                                       60
ccaaagagag tgtcagcgaa gggagatagg ggtggggccg ttttatagga tttgggtagg
                                                                      120
taaaggaaaa ttacaatcaa agggggttgt tctatggcag gcaggggcgg gggtcacaag
                                                                      180
gtgctcagtg gggaagcttc tgagccagga gaaggaattt cacaaggtta atcgctcagt
                                                                      240
taaggtgggg caggaacaaa tcacaatggt ggaatgtcat cagttaaggc aggaacaggc
                                                                      300
cattttcact tettttgtga ttettcaett getteaggee atetggatgt atacatgeea
                                                                      360
ggtcacaggg gatatgatgg gctttgcttg gggcttcaga ggtcttgaca cacatcacta
                                                                      420
agettaetet atggattege eteaaattet ttettgeaag agateeaaga atgetetett
                                                                      480
ggggtctgga tagggacccc tttccgttga caagacctcc ccgcctccgc ttttaattgt
                                                                      540
```

<220>

<221> misc_feature
<222> (728)...(28)

```
ttggccttca ttcctcttct acagtgctcc ctgcaatcag tactggtgct gtacatattt 600 gctagcttcg tacatacggc acgaagtaga tgctcagtaa atgttggttg actgagtatc 660 ctctgcatct cggtgacatc acatcctgcg tgccgtggcg tcattctgca ttcctctgcg ggaggctcag atccggaggg tttaagtggt tgtttataac atgcaccgaa catatccaac 780 ggaggctgtg gtttccgacc gcccacaaaa agcgcggttg gcgggagtgc gggttcgggg 840 gacgcgtgg tcgagcagt tccagctctg ggcggaaaca cactgcctcg gaggcgcccg 900 gacgcgtggg tcgagccagt aataacga
```

```
<210> 5709
<211> 3918
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(2915)
<223> similar to gi4191594 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5709 gegeggagga gggggegace acaagatgge ggaceteteg etgetteagg aggacetgea 60 ggaggacgca gacggatttg gtgtggatga ctacagctca gagtctgatg tgattattat 120 accttcagcc ctggacttgg cctccacaaa gatgaaatgg ttgaacgccc cctgggaaga 180 ttgggacaaa gtatgctgca agtgagaacc atatttaacc agacaaaatg gtggcccgg 240 agtttgcctc gatacccttg agggaaagtc tgcgatgatg aaagagattg tattgctgtt 300 ttgggaaaga attagccaga ttgggccgat gattcagaac caacttgtga gagcggctga 360 attggaacag gtgcctcaca tcgcactgtt tttgttcaag aaaacccgcc tttcaattac 420 catatgettt ttttcaaaat tettaetaee etattgtggg ttagataeet tggcagatea 480 gaattaatca ggtgaggaaa acaagtcagg cagetttget tggetetgtt ggagcaggag 540 ctcattgaac gatttgatgt ggagaccaaa gtgtgccctg tcctcataga gctgacagcc 600 ccagatagca atgatgatgt gaaaacagaa gctgtggcta taatgtgcaa aatggctccc 660 catggttggg aaggatatta cagagcgtct tatcctccct aggttttgtg agatgtgctg 720 cgattgcaga atgtttcacg gttcggaaag gtctgtgctg ccaattttgg agatatttgc 780 agtgtagttg gccagcaagc tactgaagaa atgttgctgc ccagattttt ccagctttgt 840 tctgataatg tatggggagt ccgaaaggct tgtgctgaat gcttcatggc ggtttcatgt 900 gcaacatgtc aagaaatccg acggaccaaa ttatcagcac tttttattaa tttgatcagt 960 gateetteae gttgggtteg eeaageaget ttteagtete tgggaeettt catatetaet 1020 tttgctaatc catctagctc aggccagtat tttaaagaag aaagcaaaag ttcagaagag 1080 atgtcagtag aaaacaataa aaggaccaga gatcaagaag ccccagagga tgtacaagtc 1140 aggccagagg atacteette agateteagt gttagtaatt eeagtgteat aetggaaaae 1200 acgatggaag accatgctgc tgaggcatcc gggaagcctc taggtgaaat tagtgttcca 1260 ctggacaget etttactttg tactttgtee teagaatete accaggaage agetagtaat 1320 gagaatgata aaaaacctgg taactacaaa tctatgttac gaccagaggt tggcaccact 1380 tcacaagatt cagetetett agateaggaa ttgtataaet eettecattt etggaggaet 1440 cetetteetg aaatagatet agacatagag ettgaacaga actetggggg aaaacecage 1500 ccagagggac cagaggaaga atctgagggc cctgtgccca gttctccaaa catcaccatg 1560 gccaccagaa aggaactgga agaaatgata gaaaatctag agccccacat tgatgatcca 1620 gatgttaaag cacaagtgga agtgctgtcc gctgcactac gtgcttccag cctggatgca 1680 catgaagaga ccatcagtat agaaaagaga agtgatttgc aagatgaact ggatataaat 1740 gagctaccaa attgtaaaat aaatcaagaa gattctgtgc ctttaatcag cgatgctgtt 1800

```
gagaatatgg actccactct tcactatatt cacaacgatt cagacttgag caacaatagc
                                                                      1860
 agttttagcc ctgatgagga aaggagaact aaagtacaag atgttgtacc tcaggcgttg
                                                                      1920
 ttagatcagt atttatctat gactgaccct tctcgtgcac agacggttga cactgaaatt
                                                                      1980
 gctaagcact gtgcatatag cctccctggt gtggccttga cactcggaag acagaattgg
                                                                      2040
 cactgootga gagagacgta tgagactotg gootcagaca tgcagtggaa aqttcqacqa
                                                                      2100
 actictageat tetecateea egagettigea gitattettig gagateeaat tigaeagetige
                                                                      2160
 agatctggtt ccaattttta atggattttt aaaatgaccg tcgatgaagt caaggatagg
                                                                      2220
 tgttcttaaa cacttgcatg attttctgaa gcttcttcat attgacaaaa gaagagaata
                                                                      2280
 tetttateaa etteaggagt ttttggtgae agataatagt agaaattgge ggtttegage
                                                                     2340
 tgaactggct gaacagctga ttttacttct agagttatat agtcccagag atgtttatga
                                                                      2400
ctatttacgt cccattgctc tgaatctgtg tgcagacaaa gtttcttctg ttcgttggat
                                                                      2460
ttcctacaag ttggtcagcg agatggtgaa gaagctgcac gcggcaacac caccaacgtt
                                                                      2520
cggagtggac ctcatcaatg agcttgtgga gaactttggc agatgtccca agtggtctgg
                                                                      2580
teggeaagee titigtetitg tetgeeagae tgteattgag gatgaetgee tteceatgga
                                                                      2640
ccagtttgct gtgcatctca tgccgcatct gctaacctta gcaaatgaca gggttcctaa
                                                                      2700
cgtgcgagtg ctgcttgcaa agacattaag acaaactcta ctagaaaaag actatttctt
                                                                      2760
ggcctctgcc agctgccacc aggaggctgt ggagcagacc atcatggctc ttcaqatqqa
                                                                      2820
cegegacage gatgteaagt attttgcaag catecaceet gecagtacea aaateteega
                                                                      2880
agatgecatg ageacagegt ceteaaceta etagaagget tgaatetegg tgtettteet
                                                                      2940
gettecatga gageegaggt teagtgggea ttegecacge atgtgacetg ggatagettt
                                                                      3000
cgggggagga gagacettee teteetgegg actteattge aggtgeaagt tgeetacace
                                                                      3060
caataccagg gatttcaaga gtcaagagaa agtacagtaa acactattat cttatcttga
                                                                      3120
ctttaagggg aaataatttc tcagaggatt ataattgtca ccgaagcctt aaatccttct
                                                                      3180
gtetteetga etgaatgaaa ettgaattgg eagageattt teettatgga agggatgaga
                                                                     3240
ttcccagaga cctgcattgc tttctcctgg ttttatttaa caatcgacaa atgaaattct
                                                                     3300
tacageetga aggeagaegt gtgeeeagat gtgaaagaga eetteagtat eageeetaae
                                                                     3360
tettetetee caggaaggae ttgetggget etgtggeeag etgtecagee cagecetgtg
                                                                     3420
tgtgaatcgt ttgtgacgtg tgcaaatggg aaaggagggg tttttacatc tcctaaagga
                                                                     3480
cctgatgcca acacaagtag gattgactta aactcttaag cgcagcatat tgctgtacac
                                                                     3540
atttacagaa tggttgctga gtgtctgtgt ctgatttttt catgctggtc atgacctgaa
                                                                     3600
ggaaatttat tagacgtata atgtatgtct ggtgttttta acttgatcat gatcagctct
                                                                     3660
gaggtgcaac ttcttcacat actgtacata cctgtgacca ctcttgggag tgctgcagtc
                                                                     3720
tttaatcatg ctgtttaaac tgttgtggca caagttetet tgtecaaata aaatttatta
                                                                     3780
ataagateta tagagagaga tatataeaet titgattgit tietagatgi etaeeaataa
                                                                     3840
atgcaatttg tgacctgtat taatgattta aagtggggaa actagattaa aatatttgtc
                                                                     3900
ttttaactag ttaaaaaa
                                                                     3918
```

```
<211> 1933
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1631)...(655)

<223> similar to gi5225320 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5710

```
<400> 5710 ttttttttt ttgttagttg tttttgtttt taatttgtct ccaataagca atgtcttctg
```

```
ccccatccag ccatgggaag tgggtcccac gtgaaggggg ccccaccacc ccactttggg
                                                                    120
aagctgaagg ctagagactt cgggagcccc ccccggctca agactccccc ctacgctggg
                                                                    180
240
                                                                    300
cttaggccac aggcccccg ggggcaggga gacagagtgg gggggcccga agctccctgg
tcctggggaa gagttaaaaa gttctggggg taggccctgg gccccgtggg ggcaagttta
                                                                    360
agagatgagg ggaggtttac tcctttaggc ccagggagtt ggttagaaga cagttggggg
                                                                    420
ctggtagaaa atgcctggtt taaagccttg gcctctagga ggtttttaga gatttgctgg
                                                                    480
ggttgggggc ccagggttgc tgggaccccc agtttttggg gaagggagct gtaagagatt
                                                                    540
gggggatgtt ctgagctccc cagacaagaa ctgctggtta agagggggcc aggcccggtt
                                                                    600
ggggctcage tgtccctgag gagctcggca tcccgcctgg gagatgcagc tgtcactggg
                                                                    660
gtttctccct ctctgttgtc ctggcctcgt ccttggcagg tggcggggac ttcttggggg
                                                                    720
aagetgaagt getggggttg gggacccccg cccccgactg ggcatctatg ctggcgtgcc
                                                                    780
teettgegga caaggteete cageteette tteeateeaa ggageteage aagggeeagg
                                                                    840
cagccctggt cgcattcacc cagccaggcc acgtccctgc aaggaggtac ccatgaccag
                                                                    900
gaggaggtee acetteagga agtetgaetg catacaggag aagaaacgeg etgggagget
                                                                    960
ctcaccaaaa aagacgatta tcaggcttca ccaggctctg acagtcttca cacttgggcg
                                                                   1020
teaceteaga gaagatette tettteatee agettagegg gtattegtge eggeagetgg
                                                                   1080
cgctgacgca gtgtgatgtg tagaagggtg ccgtgcgcct ccaacaaagt cctcctgttc
                                                                   1140
cagecegget attegeteca gggtatetat gttetgegtg tageagegea ggagtageee
                                                                   1200
ettgteette ageaggegee atgaagtagt gaacaagatg gttggeettg aaaetgeeee
                                                                   1260
aggataagag ttcccttggc gagggcgaag aagggttccg gatgtttctt gaaaatagct
                                                                   1320
gatctccaaa gaatggcctc tgggttaggg aaagatggtc acttctctag gttgttcaat
                                                                   1380
aagaggccgg tggatggaga agcgaaaagt cggggatgcc tgcggatgtg gagattccag
                                                                   1440
ctcccaccaa acagatgact ctgcgacagc gttcgctctg catgtaccgg gccacccctt
                                                                   1500
                                                                   1560
ccaaggtcag ctcgtccagc agacgctcct tctggctgcc caggctgagc gtctgggaga
ataagtteeg caggaagtee atgtetgett etecaceage ggeteeteee teagagtetg
                                                                   1620
aatctgagtc ctggaagggg tggggtggag tggccaggcc cgagaggtgg gattagggag
                                                                   1680
ggaggagagg gggtgatacc aggtttgggg aaaaggctgt ggcaggaagg tggcctgagg
                                                                   1740
aagtgegggg tggtggagag aetgeaetgg ggetagetee agggetetgg gaeaggetge
                                                                   1800
eggggttgga gteetggeea tgeeegteee caggageaag aceteatgtg agtggetttg
                                                                   1860
ctttgctttt cttttttgag acagtgtctc gctctgttgc ccaggctgga gtgcactggt
                                                                   1920
gcagtcacag ctt
                                                                   1933
```

```
<210> 5711
<211> 4268
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2249)...(2871)
<223> similar to gi841318 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5711
aaggagaaaa gagtgacagt acaattgcct acagaatcca tacagaagaa ccaggaagat 60
aagctcaaga tggttcccag gaagcaaaga gaatttagcg gatctgacag agggaaactt 120
ccaggaagtg aagaaaaaaa tcagggacca tcaatgattg gtcgaaaaga agagagatta 180
ataactgaaa gaaaacacga acatctgaag aataaatcag caccaaaggt cgtcaagcaa 240
aaggttatcg atgcacatct tgattcacag actcagaatt ttcagcaaac acaaatacag 300
```

```
accgctgaaa gtaaagctga acataaaaaa ttgccccagc catataatag tctgcaggaa
                                                                      360
gaaaaatgtc tcgaagtcaa gggcatacaa gagaaacaag tcttctctaa tactaaagat
                                                                      420
tcaaagcaag agattacaca gaacaaatct ttcttttcct ctgtgaaaga atcccagcgg
                                                                      480
                                                                      540
gatgatggaa aaggtgcctt aaatatagtg gaattcttga gaaaacgtga agaactgcaa
cagattttqt cgagagtqaa acagtttgaa gcagagccaa ataaaagggg ccttaaaaca
                                                                      600
                                                                      660
tttcagacac tattaaatac tatcccagga tggctgataa gtgaagataa gagagaatat
                                                                      720
gcagttcaca ttgccatgga gaataattta gaaaaagtaa aagaagaaat aacacatatt
aaaactcaag cggaagatat gcttgtgtcc tatgaaaata taattcagac agccatgatg
                                                                      780
tectecaaaa caggaaaace gggaaataaa eccactagte ttgatgaaac atcatecaaa
                                                                      840
                                                                      900
gtatctaatg ttcatgtcag caataataaa aatagtgaac agaaagaaaa taaaattgcc
aaagagaaaa cagtacagca ccaagtaaca gctcatcatg aagcaactgt tcgtagtcac
                                                                      960
gtgaaaaccc atcaggaaat taaacttgat gatagcaaca ttcctcctcc ctctttaaaa
                                                                     1020
acacgcccac cgtcaccaac ttttatcaca atagaatcta ctgcccgacg aacagaaaac
                                                                     1080
cctactaaga acgagettte teagteeect aaaaaggaca gttatgttga acceecacea
                                                                     1140
agaaggccca tgtcgcaaaa atctgaaatt cacagagcaa acacttcccc ttctccaccc
                                                                     1200
aggagteget etgaacaact tgteagaete aaagacaeca etgeaaagtt atecaaaggg
                                                                     1260
gccatcccat gtccagcagc aaccccggtt ccaattgtag agaagaggtc tgaaatcatc
                                                                     1320
atgteteetg caacactteg tegteaaatt aagatagaaa etegeggtae ggaeteteea
                                                                     1380
cctacaatca caataccagt aaatataaat catgctgcta gtggttcctt cagagaatct
                                                                     1440
gtggacgctc aagaggaaat caggaaagtg gagaagagag ctacttatgt tcataaagat
                                                                     1500
ggactaaatt ccactgatca catggtgccc gacactgaaa gttatgatgc agttgaaatc
                                                                     1560
atccgcaagg ttgcagtgcc tcctcgcctg tcagagcaca cacagagata tgaagcggcc
                                                                     1620
aaccgaactg ttcaaatggc tgaaaatttc gtgaatgacc ctgaaaatga aataaacaga
                                                                     1680
tggttcaggg aatttgagca tggcccagtt tctgaagcaa agtcaaatag aagagtttat
                                                                     1740
gcaaagggag aaacaaacca taacatacaa caagaaagtc gtacattttg taaggaggaa
                                                                     1800
tttggattaa catctttagg aaacacgagt tttacagact tttcttgcaa acatcctaga
                                                                     1860
gaactgcgag aaaagattcc tgttaagcag cccaggatct gctctgaaac caggtctcta
                                                                     1920
agtgaacatt teteaggeat ggatgeattt gagagteaaa ttgttgagte gaagatgaaa
                                                                     1980
acctetteat caeatagete agaagetgge aaatetgget gtgaetteaa geatgeecea
                                                                     2040
ccaacctatg aggatgtcat tgctggacat attttagata tctctgattc acctaaagaa
                                                                     2100
gtaagaaaaa attttcaaaa gacgtggcaa gagagtggaa gagtttttaa aggcctggga
                                                                     2160
tatgcaaccg cagatgette tgcaactgag atgagaacca cettecaaga ggaatetgca
                                                                     2220
tttataagtg aagctgctgc tccaagacaa ggaaatatgt atactttgtc aaaagacagt
                                                                     2280
ttatccaatg gagtgcctag tggcagacaa gcagaatttt cataagtcct gcttccgatg
                                                                     2340
ccaccattgc aacagtaaac taagtttggg aaattatgca tcacttcatg gacaaatata
                                                                     2400
ctgtaaacct cactttaaac aacttttcaa atccaaagga aattatgatg aaggttttgg
                                                                     2460
acataagcag cataaagata gatggaactg caaaaaccaa agcagatcag tggactttat
                                                                     2520
tcctaatgaa gaaccaaata tgtgtaaaaa tattgcagaa aacacccttg tacctggaga
                                                                     2580
togtaatgaa catttagatg otggtaacag tgaagggcaa aggaatgatt tgagaaaatt
                                                                     2640
aggggaaagg ggaaaattaa aagtcatttg gcctccttcc aaggagatcc ctaagaaaac
                                                                     2700
ettaccettt gaggaagage teaaaatgag taaacetaag tggecacetg aaatgacaac
                                                                     2760
cctgctatcc cctgaattta aaagtgaatc tctgctagaa gatgttagaa ctccagaaaa
                                                                     2820
taaaggacaa agacaagatc actttccatt tttgcagcct tatctacagt ccacccatgt
                                                                     2880
ttgtcagaaa gaggatgtta taggaatcaa agaaatgaaa atgcctgaag gaagaaaaga
                                                                     2940
tgaaaagaag gaaggaagga agaatgtgca agataggccg agtgaagctg aagacacaaa
                                                                     3000
gagtaacagg aaaagtgcta tggatcttaa tgacaacaat aatgtgattg tgcagagtgc
                                                                     3060
tgaaaaggag aaaaatgaaa aaactaacca aactaatggt gcagaagttt tacaggttac
                                                                     3120
taacactgat gatgagatga tgccagaaaa tcataaagaa aatttgaata agaataataa
                                                                     3180
taacaattat gtagcagtct catatctgaa taattgcagg cagaagacat ctattttaga
                                                                     3240
atttcttgat ctattaccct tgtcgagtga agcaaatgac actgcaaatg aatatgaaat
                                                                     3300
tgagaagtta gaaaatacat ctagaatctc agagttactt ggtatatttg aatctgaaaa
                                                                     3360
gacttattcg aggaatgtac tagcaatggc tctgaagaaa cagactgaca gagcagctgc
                                                                     3420
tggcagtcct gtgcagcctg ctccaaaacc aagcctcagc agaggcctta tggtaaaggg
                                                                     3480
gggaagttca atcatctctc ctgatacaaa tctcttaaac attaaaggaa gccattcaaa
                                                                     3540
gagcaaaaat ttacactttt tcttttctaa caccgtgaaa atcactgcat tttccaagaa
                                                                     3600
aaatgagaac attttcaatt gtgatttaat agattctgta gatcaaatta aaaatatgcc
                                                                     3660
atgcttggat ttaagggaat ttggaaagga tgttaaacct tggcatggtg aaacaacaga
                                                                     3720
```

```
agctgcccgc aataatgaaa acacaggttt tgatgctctg agccatcaat gtacagctaa
                                                                     3780
qcctttqttt cccaqaqtgg aqqtqcagtc agaacaactc acggtggaag agcagattaa
                                                                     3840
aagaaacagg tgctacagtg acactgagta aaatatctat ggccactgac agtccacact
                                                                     3900
taggcactga gagatattga tgttctgaaa taagatttta tgaatttgga tacccttttg
                                                                     3960
                                                                     4020
aggaacttga tgtaaacatg gtgttcagaa atctcgtgtc tatctcaatg ggatatttct
tgtattacac cttgtcattt ttttcacaat ttatttacat ctacttttgt ttgaactgga
                                                                     4080
atgaagagat gaaacactat ggatatgttt tccattcaaa tggcacttta gcatattggt
                                                                     4140
ctgttttcct gtaaaacatc atgggtgtga tttttatact gctgctgctt gtcacaatta
                                                                     4200
ttataacttc tctgtaattt cctctgaaat aaaattgaat cacctgaggt gcaaaccaaa
                                                                     4260
aaaaagtc
                                                                     4268
```

```
<210> 5712
<211> 1817
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (173)...(1135)
<223> similar to gi3329475 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5712
geggtggaat tegaggageg aeggaagega egegggggta egetgetgeg eggegeeegg
                                                                    60
tttcgtgccc gcggccgact gcgcagcctg tccgcgagtc tgagatactt acagagagct
                                                                   120
acaatggaaa agtcctggat gctgtggaac tttgttgaaa gatggctaat agccttggct
                                                                   180
teatggtett gggetetetg cegtatttet ettttacett taatagtgae tttteatetg
                                                                   240
tatggaggca ttatcttact tttgttaata ttcatatcaa tagcaggtat tctgtataaa
                                                                   300
ttccaggatg tattgcttta ttttccagaa cagccatcct cttcacgtct ttatgttccc
                                                                   360
atgcccactg gcattccaca tgaaaacatt ttcatcagaa ccaaagatgg aatacgtctg
                                                                   420
aatcttattt tgatacgata cactggagac aattcaccct attccccaac tataatttat
                                                                   480
tttcatggga atgcaggcaa cataggtcac aggttgccaa atgcattact tatgttggtt
                                                                   540
aacctcaaag ttaacctttt gctggttgat tatcgaggat atggaaaaag tgaaggagaa
                                                                   600
gcaagtgaag aaggactcta cttagattct gaagctgtgt tagactacgt gatgactagc
                                                                   660
cetgacettg ataaaacaaa aatetatett tetggeeget eeettgggtg gageagegge
                                                                   720
tattcatctg gcttctgaca attcacatag gatttcagcc attatggtgg agaacacatt
                                                                   780
tttaagcata ccacatatgg ccagcacttt attttcattc tttccgatgc gttaccttcc
                                                                   840
tttatggtgc tacaaaaata aatttttgtc ctacagaaaa atctctcagt gtagaatgcc
                                                                   900
ttcacttttc atctctggac tctcagatca attaattcca ccaqtaatqa tqaaacaact
                                                                   960
ttatgaactc tececatete ggactaagag attagecatt tttecagatg ggacteacaa
                                                                  1020
tgacacatgg cagtgccaag gctatttcac tgcacttgaa cágttcatca aagaagtcgt
                                                                  1080
aaagagccat totootgaag aaatggcaaa aacttoatot aatgtaacaa ttatataatq
                                                                  1140
tttccctttt tgattattgc attgtatttt aatttgtgca gaatgataaa gaatgttcct
                                                                  1200
tttagaagtg tgttatgtct gtacctgtct gaagagtgac attaaacttt gaaaggactt
                                                                  1260
cactgeteet ttacgatatt ccaaatagtt ttttacattg gaaaagetaa ttettgggat
                                                                  1320
tettteatae atttteatea aaaettteag tgtgattatg tatteatate tteagtttaa
                                                                  1380
tatgtcagta taatagatat tgttcaaaag tttcttgttg ctaaagtggt gtaatctgtt
                                                                  1440
acacagatga atagctagat gtggaaagag atatgtaaac aagaaacctt tgggtattgt
                                                                  1500
ttettaagta aatattggga caateatggt aageaaaett agttetgtaa etgeattttt
                                                                  1560
1620
```

```
cattttacat gtaaatagca ctggtcatat actgatgtat atggttatct gggttatatc 1680 tatttttatg taaactctat tttgtttttg gcaagaagtg aaattgagac ttatgtgcag 1740 gttgccattg aattttgctc tggtgaatgc tgagatccag ctttttctta caaataaatg 1800 ggaccctgtt ttccaaa 1817
```

```
<210> 5713
<211> 2610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2611)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (87)...(1280)
<223> similar to gi5262551 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5713 cttgtgggaa gagctgaagc aggcgctctt ggctcggcgc ggcccgctgc aatccgtgga 60 ggaacgcagc cgccgagcca ccatcagtgc ctgggcactt acaggaaggc ttcggctgcg 120 tggtcaccaa ccgattcgac cagttatttg accgacgaat cgggancccg ttccgaggtg 180 ctgaaggcag cagagaacaa gaaaaaagaa gcccggcggg ggcgcgtgtg tggggccctg 240 gggcatagag cgcagctcag ggccggcggg cccacgacca actccaacgc ggcaggcaaa 300 cagcgtgcgc aaggagtccc agaaagaccg caagaacccg ctgccccca gcgttggcgt 360 ggttgacaag aaagaggaga cgcagccgcc cgtggcgctt aagaaagaag gaataagacg 420 agttggaaga agacctgatc aacaacttca gggtgaaggg aaaataattg atagaagacc 480 agaaaggcga ccacctcgtg aacgaagatt cgaaaagcca cttgaagaaa agggtgaagg 540 aggegaattt teagttgata gacegattat tgacegaeet attegaggte gtggtggtet 600 tggaagaggt cgagggggcc gtggacgtgg aatgggccga ggagatggat ttgattctcg 660 tggcaaacgt gaatttgata ggcatagtgg aagtgataga tettetttt cacattacag 720 tggcctgaag cacgaggaca aacgtggagg tagcggatct cacaactggg gaactgtcaa 780 agacgaatta actgacttgg atcaatcaaa tgtgactgag gaaacacctg aaggtgaaga 840 acatcatcca gtggcagaca ctgaaaataa ggagaatgaa gttgaagagg taaaagagga 900 gggtccaaaa gagatgactt tggatgagtg gaaggctatt caaaataagg accgggcaaa 960 agtagaattt aatateegaa aaceaaatga aggtgetgat gggeagtgga agaagggatt 1020 tgttetteat aaateaaaga gtgaagagge teatgetgaa gatteggtta tggaeeatea 1080 tttccggaag ccagcaaatg atataacgtc tcagctggag atcaattttg gagaccttgg 1140 ccgcccagga cgtggcggca ggggaggacg aggtggacgt gggcgtggtg ggcgccaaa 1200 ccgtggcagc aggaccgaca agtcaagtgc ttctgctcct gatgtggatg acccagaggc 1260 atteccaget etggettaae tggatgeeat aagacaaeee tggtteettt gtgaaeeett 1320 ctgttcaaag cttttgcatg cttaaggatt ccaaacgact aagaaattaa aaaaaaaag 1380 actgtcattc ataccattca cacctaaaga ctgaatttta tctgttttaa aaatgaactt 1440 ctcccgctac acagaagtaa caaatatggt agtcagtttt gtatttagaa atgtattggt 1500 agcagggatg ttttcataat tttcagagat tatgcattct tcatgaatac ttttgtattg 1560 ctgcttgcaa atatgcattt ccaaacttga aatataggtg tgaacagtgt gtaccagttt. 1620 aaagetttea etteatttgt gttttttaat taaggattta gaagtteece caattacaaa 1680

```
ctggttttaa atattggaca tactggtttt aatacctgct ttgcatattc acacatggtc
                                                                     1740
aactgggaca tgttaaactt tgatttgtca aattttatgc tgtgtggaat actaactata
                                                                     1800
tgtattttaa ettagtttta atatttteat ttttggggaa aaatettttt teaettetea
                                                                     1860
tgatagetgt tatatatata tgetaaatet ttatatacag aaatateagt aettgaacaa
                                                                     1920
                                                                     1980
attcaaagca catttggttt attaaccctt gctccttgca tggctcatta ggttcaaatt
ataactgatt tacattttca gctatattta ctttttaaat gcttgagttt cccattttaa
                                                                     2040
aatctaaact agacatctta attggtgaaa gttgtttaaa ctacttattg ttggtaggca
                                                                     2100
categtgtca agtgaagtag ttttataggt atgggttttt tetececett caccagggtg
                                                                     2160
ggtggaataa gttgatttgg ccaatgtgta atatttaaac tgttctgtaa aataagtgtc
                                                                     2220
tggccatttg gtatgatttc tgtgtgtgaa aggtcccaaa atcaaaatgg tacatccata
                                                                     2280
atcagccacc atttaaccct tccttgttct aaaacaaaaa ccaaagggcg ctggttggta
                                                                     2340
gggtgaggtg ggggagtatt ttaatttttg gaatttggga agcagacagc tttactttgt
                                                                     2400
aaggttggaa cagcagcact atacatgaaa tataaaccaa aaacctttac tgtttctaaa
                                                                     2460
tttcctagat tgctattatt tggttgtaag ttgagtattc cacagaaagt ggtaattatc
                                                                     2520
tettetetet teeteeatta gaaaattagg taaataatgg atteetataa tgggageate
                                                                     2580
accacttatt aaaacacaca tagaatgatg
                                                                     2610
```

```
<210> 5714
<211> 1026
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (497)...(237)
<223> similar to gi436173 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5714
ttttttttt ttaccaacag tacactttta attaaggacc tgtagctgtg caggatgcaa
                                                                       60
acagetggge ateagtgaet tteeteetge eeeeggtttg teeetgatgg tggeagaaga
                                                                      120
teccagetga ecaeggeece tttetetggg gteagaggga gaagacagge geagteagea
                                                                      180
ggggcagctg ttgcaggtgg gagggttatt ttcccacagg aacaaaggtc tccatgatga
                                                                      240
tacggggtct ctatagtcat gttgagagcc taatggccct tggcataatt gctggtgtcg
                                                                      300
gggtagaagg tgtcttggag tttgctcaag tggttgagag ggagggaggt gccatagact
                                                                      360
tggaggaact gggcacgaag ccaaggatac aaatccaggc agggctgtgg ggcaggatag
                                                                      420
agagcagggc cttctactga aggagtgact caggaaggag gaggggaagg tgacaagcc
                                                                      480
ctgggcagga gccctgtggc catggatcat tttaaattga gaccagagag tgagcagtcc
                                                                      540
agggcageta taacettgge tagaaaggge agaggcagat gggeetgete catetegeet
                                                                      600
cttaagaagg tgggcaggac ggagatgcca cagtggatgc cactgctgcc acagcctcct
                                                                      660
geggaeteca ggaaggaage etggetetea gecatgeagg atggaaagaa agattetatt
                                                                      720
ccaggagggg agctgccctg gaacgcccca aggacagcca ggacccactg ttcattcagg
                                                                      780
attoccgcat tttctcctac gggagctaac gcctgtgcct gggtcctggc agcgctctgg
                                                                      840
actocacact ctcctcctgg gtttcacctt tgtaacagga tccctgcaga ccacgcccac
                                                                      900
gacaaacact gtctccagag ggcaggacaa aggaagggca cggcgccggg cggtggtgtg
                                                                      960
gttgcccatc aggaagaggc cgacttcttc cagtgaaact gggcagacag aaggcagtga
                                                                     1020
gaaatg
                                                                     1026
```

```
<210> 5715
<211> 6521
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (164)...(4670)
<223> similar to gi2370202 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5715 agtgtggtgg aattcgctgg agctggtgct gaaaaagggg gtttgcagag gctgccctgg 60 . ggctggtgct gaaagaagag cccacagctg acttcatggt gctacaataa cctcagaatc 120 tacttttcac tctcaggaga acccacatgt ctaatattta gacatgatgg caaactgggc 180 ggaagcaaga cototootoa ttottattgt tttattaggg caatttgtot caataaaagc 240 ccaggaagaa gacgaggatg aaggatatgg tgaagaaata gcctgcactc agaatggcca 300 gatgtactta aacagggaca tttggaaacc tgccccttgt cagatctgtg tctgtgacaa 360 tggagccatt ctctgtgaca agatagaatg ccaggatgtg ctggactgtg ccgaccctgt 420 aacgccccct ggggaatgct gtcctgtctg ttcacaaaca cctggaggtg gcaatacaaa 480 ttttggtaga ggaaaaaagg gacaaaaggg agaaccagga ttagtgcctg ttgtaacagg 540 catacgtggt cgtccaggac cggcaggacc tccaggatca cagggaccaa gaggagagcg 600 agggccaaaa ggaagacctg gccctcgtgg acctcaggga attgatggag aaccaggtgt 660 tectggteaa cetggtgete caggacetee tggacateeg teccacecag gaceegatgg 720 cttgagcagg ccgttttcag ctcaaatggc tgggttggat gaaaaatctg gacttgggag 780 tcaagtagga ctaatgcctg gctctgtggg tcctgttggc ccaaggggac cacagggttt 840 acaaggacag caaggtggtg caggacctac aggacctcct ggtgaacctg gtgatcctgg 900 accaatgggt ccgattggtt cacgtggacc agagggccct cctggtaaac ctggggaaga 960 tggtgaacct ggcagaaatg gaaatcctgg tgaagtggga tttgcaggat ctccgggagc 1020 tegtggattt cetggggete etggtettee aggtetgaag ggteacegag gacacaaagg 1080 tettgaagge cetaaaggtg aagttggage acetggttee aagggtgaag etggeeceae 1140 tggtccaatg ggtgccatgg gtcctctggg tccgagggga atgccaggag agagagggag 1200 acttgggcca cagggtgctc ctggacaacg aggtgcacat ggtatgcctg gaaaacctgg 1260 accaatgggt cctcttggga taccaggctc ttctggtttt ccaggaaatc ctggaatgaa 1320 gggagaagca ggtcctacag gggcgcgagg ccctgaaggt cctcaggggc agagaggtga 1380 aactgggccc ccaggtccag ttggctctcc aggtcttcct ggtgcaatag gaactgatgg 1440 tactcctggt cccaaaggcc caacgggctc tccgggtacc tctggtcctc ctggctcagc 1500 agggeeteet ggateteeag gaeeteaggg tageaetggt eeteagggaa ttegaggeea 1560 accggtgatc ccaggagttc caggtttcaa aggagaagct ggcccaaaag gggaaccagg 1620 gccacatggt attcagggtc cgataggccc acccggtgaa gaaggcaaaa gaggtcccag 1680 aggtgaccca ggaacagttg gtcctccagg gccagtggga gaaaggggtg ctcctggcaa 1740 tegtggtttt ceaggetetg atggtttace tgggecaaag ggtgeteaag gagaaegggg 1800 teetgtaggt tetteaggae ceaaaggaag ceagggggat ceaggaegte caggggaace 1860 tgggcttcca ggtgctcggg gtttgacagg aaatcctggt gttcaaggtc ctgaaggaaa 1920 acttggacct ttgggtgcgc caggggaaga tggccgtcca ggtcctccag gctccatagg 1980 aatcagaggg cagcccggga gcatgggcct tccaggcccc aaaggtagca gtggtgaccc 2040 tgggaaacct ggagaagcag gaaatgctgg agttcctggg cagaggggag ctcctggaaa 2100 agatggtgaa gttggtcctt ctggtcctgt gggcccgccg ggtctagctg gtgaaagagg 2160 agaacaagga ceteeaggee eeacaggttt teaggggett eetggteete cagggeetee 2220 tggagaaggt ggaaaaccag gtgatcaagg tgttcctgga gatcccggag cagttggccc 2280 gttaggacet agaggagaac gaggaaatee tggggaaaga ggagaacetg ggataactgg 2340 actccctggt gagaagggaa tggctggagg acatggtcct gatggcccaa aaggcagtcc 2400

```
2460
aggtecatet gggaceeetg gagatacagg cecaccaggt etteaaggta tgeegggaga
                                                                     2520
aagaggaatt gcaggaactc ctggccccaa gggtgacaga ggtggcatag gagaaaaaagg
                                                                     2580
tgctgaaggc acagctggaa atgatggtgc aagaggtctt ccaggtcctt tgggccctcc
                                                                     2640
aggtccggca ggtcctactg gagaaaaggg tgaacctggt cctcgaggtt tagttggccc
                                                                     2700
teetggetee eggggeaate etggtteteg aggtgaaaat gggeeaactg gagetgttgg
                                                                     2760
ttttgccgga ccccagggtc ctgacggaca gcctggagta aaaggtgaac ctggagagcc
                                                                     2820
aggacagaag ggagatgetg gtteteetgg accaeaaggt ttageaggat eccetggeee
tcatggtcct aatggtgttc ctggactaaa aggtggtcga ggaacccaag gtccgcctgg
                                                                     2880
                                                                     2940
tgctacagga tttcctggtt ctgcgggcag agttggacct ccaggccctg ctggagctcc
                                                                     3000
aggacctgcg ggacccctag gggaacccgg gaaggaggga cctccaggtc ttcgtgggga
ecetggetet catgggegtg tgggagateg aggaceaget ggeecectg gtggeecagg
                                                                     3060
agacaaaggg gacccaggag aagatgggca acctggtcca gatggccccc ctggtccagc
                                                                     3120
tggaacgacc gggcagagag gaattgttgg catgcctggg caacgtggag agagaggcat
                                                                     3180
                                                                     3240
geceggeeta ceaggeecag egggaacace aggaaaagta ggaccaactg gtgcaacagg
agataaaggt ccacctggac ctgtggggcc cccaggctcc aatggtcctg taggggaacc
                                                                     3300
tggaccaaaa ggtccagctg gcaatgatgg taccccagga cgggatggtg ctgttggaga
                                                                     3360
                                                                     3420
acgtggtgat cgtggagacc ctgggcctgc aggtctgcca ggctctcagg gtgcccctgg
aactcctggc cctgtgggtg ctccaggaga tgcaggacaa agaggagatc cgggttctcg
                                                                     3480
gggtcctata ggaccacctg ggtcgagctg gaaaacgtgg attacctgga ccccaaggac
                                                                     3540
ctcgtggtga caaaggtgat catggagacc gaggcgacag aggtcagaag ggccacagag
                                                                     3600
getttaetgg tetteagggt etteetggee eteetggtee aaatggtgaa caaggaagtg
                                                                     3660
ctggaatccc tggaccattt ggcccaagag gtcctccagg cccagttggt ccttcaggta
                                                                     3720
aagaaggaaa ccctgggcca cttgggccaa ttggacctcc aggtgtacga ggcagtgtag
                                                                     3780
gagaagcagg acctgagggc cctcctggtg agcctggccc acctggccct ccgggtcccc
                                                                     3840
etggecacet tacagetget ettggggata teatggggea etatgatgaa ageatgecag
                                                                     3900
atccacttcc tgagtttact gaagatcagg cggctcctga tgacaaaaac aaaacggacc
                                                                     3960
caggggttca tgctaccctg aagtcactca gtagtcagat tgaaaccatg cgcagccccg
                                                                     4020
atggetegaa aaageaceca geeegeaegt gtgatgaeet aaagetttge catteegeaa
                                                                     4080
agcagagtgg tgaatactgg attgatccta accaaggatc tgttgaagat gcaatcaaag
                                                                     4140
                                                                     4200
tttactgcaa catggaaaca ggagaaacat gtatttcagc aaacccattc cagtgtaccc
acgtaaaaac cactggtagg ccagtaaatt ttcctgacaa taaacctgtt tggtatggtc
                                                                     4260
ttgatatgaa cagagggtct cagttcgctt atggagacca ccaatcacct aatacagcca
                                                                     4320
ttactcagat gacttttttg cgccttttat caaaagaagc ctcccagaac atcacttaca
                                                                     4380
tetgtaaaaa cagtgtagga tacatggaeg atcaagetaa gaaceteaaa aaagetgtgg
                                                                     4440
ttctcaaagg ggcaaatgac ttagatatca aagcagaggg aaatattaga ttccggtata
                                                                     4500
tegttettea agacaettge tetaagegga atggaaatgt gggeaagaet gtetttgaat
                                                                     4560
atagaacaca gaatgtggca cgcttgccca tcatagatct tgctcctgtg gatgttggcg
                                                                     4620
gcacagacca ggaattcggc gttgaaattg ggccagtttg ttttgtgtaa agtaagccaa
                                                                     4680
gccaagacac atcgacaatg agcaccacca tcaatgacca ccgccattca caagaacttt
                                                                     4740
gactgtttga agttgateet gagactettg aagtaatgge tgateetgea teageattgt
                                                                     4800
atatatggtc ttaagtgcct ggcctcctta tccttcagaa tatttatttt acttacaatc
                                                                     4860
ctcaagtttt aattgatttt aaatattttt caatacaaca gtttaggttt aagatgacca
                                                                     4920
atgacaatga ccaccettgc agaaagtaaa ctgattgaat aaataaatet ccgttttett
                                                                     4980
caatttattt cagtgtaatg aaaaaggtgg cttagtattt atgaggaaat tcttcttcct
                                                                     5040
ggcaggtage ttaaagagtg gggtatacag agccacaaca catgtttatt ttgcttggct
                                                                     5100
gcagttgaaa aatagaaatt agtgcccttt tgtgacctct cattccaaga ttgtcaatta
                                                                     5160
adaatgagtt taaaatgttt aacttgtgat cgagacctac atgcatgtct tgatattgtg
                                                                     5220
taactataat agagactett taaggagaat ettaaaaaaaa aaaaaaaegt tteteaetgt
                                                                     5280
cttaaataaa atttttaaat agtatatatt caggggcatt ttggaaaaca aagggaattt
                                                                     5340
acttcgactt cttaaatttt tgtaaaagac tataagttta aacatctttc tcattcaaat
                                                                     5400
ttaaagatat ctttctcctc ttgatcaatc tatcaatatt gatagaagtc acactagtat
                                                                     5460
ataccattta atacatttac actttcttat ttaagaagat attgaatgca aaataattga
                                                                     5520
catatagaac tttacaaaca tatgtccaag gactctaaat tgagactctt ccacatgtac
                                                                     5580
aatctcatca tcctgaagcc tataatgaag aaaaagatct agaaactgag ttgtggagct
                                                                     5640
gactetaate aaatgtgatg attggaatta gaccatttgg cetttgaact tteataggaa
                                                                     5700
aaatgaccca acatttctta gcatgagcta cctcatctct agaagctggg atggacttac
                                                                     5760
tattettgtt tatattttag atactgaaag gggetatget tetgttatta ttecaagaet
                                                                     5820
```

```
ggagataggc agggctaaaa aggtattatt atttttcctt taatgatggt gctaaaattc
                                                                     5880
ttcctataaa attccttaaa aataaagatg gtttaatcac taccattgtg aaaacataac
                                                                     5940
tgttagactt cccgtttctg aaagaaagag catcgttcca atgcttgttc actgttcctc
                                                                     6000
tgtcatactg tatctggaat gctttgtaat acttgcatgc ttcttagacc agaacatgta
                                                                     6060
ggtccccttq tgtctcaata ctttttttt cttaattgca tttgttggct ctattttaat
                                                                     6120
ttttttcttt taaaataaac agctgggacc atcccaaaag acaagccatg catacaactt
                                                                     6180
tggtcatgta tctctgcaaa gcatcaaatt aaatgcacgc ttttgtcatg tcagtggttt
                                                                     6240
ttgttttgtg aaatteettt gaecatatta gatetattte attteeaata gtgaaaagga
                                                                     6300
gatgtggtgg tatactttgt ttgccatttg tttaaaagat acaacggata ccttctatca
                                                                     6360
tgtatgtact ggcttataaa tgaaaatcta tctacaacat tacccacaaa ggcaacatga
                                                                     6420
caccaattat cactgeetet geeettaaaa atgteagagt agtattattg ataaaaaggg
                                                                     6480
caagcaatag atttttcatg actgaataaa ctgtaataat a
                                                                     6521
```

```
<210> 5716
<211> 4188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1803)...(1580)
<223> similar to gi504529 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5716 agtgtcgtgg aatteetget egggetgegt gagetgaeee egetetetgt geaectaett 60 ttgctgcgtt tggtgctgag cctgaagtcc caggacaggc ggctgagggg gaaagatggt 120 gtgaattggg tgggcagaga caactgaaag ccacaggacc cggttggcac ctttttggcc 180 gcctgcgcct ttgcctgcag ccccgctccc tgggtcaccc gaaggaggag ctggcgctct 240 ttccgggcgc agaagcaccc gacccacgct ggaggaaacg gtccctctgg gcaggagaag 300 ctttgggcct ggctggagca cactcacgga accacgccaa cgcctggcct gtagccagct 360 eccaectece eteccaectt etaaaatget tgeggatete aegtggeega eectaaceag 420 atacacatgg ggaaaggaat caggtggcac acataccgcc tttactccat agagaacttc 480 caattgtggg taagaacaaa gccccacctc tgcctaatag atgcagtttt ccacctgcag 540 ccaaaaagac aacctgttat tagctttttt cccagaggac aggcatctct atgaaactgc 600 cattgcaaaa tttgccgaca gtgagataac cagetecatt ttgcttctaa cetecatgce 660 ctccttgttt actgctgcac gcaggttgaa ctgtgggagg aacttagttt aaaacaaaga 720 tgataacago cotttoccaa aggaaacott tootggggat tagootgott ttgtgggaco 780 aacagattag ccacaagatt agaaactacg gttgaagagt cacgcagcgg gaggctacag 840 gattetgace etceccaaac tgeteetgge gataacatea ceategtaaa geetaagate 900 agcacttggt gggtcacctg gcaccaccca ggctcatctg atgttgtggc acccaggaac 960 tgactcagtg cgaaaacagc ttcgactccc tgtgatttca tctctgacct gaccaatggg 1020 tacttotgac toactggotg cococcacco accagottat otttaaaaac tocaaaccoc 1080 agatgctcag ggagaccgag taataataaa actccagtct cccacacagc tagctctgcg 1140 tgaattacct tttctctgtt gcaaatgccc tttcttgata aattggctgt ctaggtaaca 1200 gggaaggtga acceactggg cagttacact tttatccacc cttccagctg gatcacgcgc 1260 cctcttcaat gacatgacac gcagctagga gtgtatgagc ttgctggccg gcaccttccg 1320 tcctgggatc gcataggcaa ggcctcaatg gacagccagg gtgcctgggt ccggttccca 1380 ctttttttc tgtcctgttc tcgtttcctc tttgcttggg ccaaagaggg ttgggccagg 1440 gtcctgagtg caagggcttg gcttggtgaa ttaaagtggc agtagccgtg tggcagagaa 1500

```
aatttgtaga tgggtgaaat cctgggccta cacagtgaca aagtgtatat agacagccag
                                                                     1560
cctagttqqt qqatqtqaca accccagact cttctagatt tgtggatccg tgcacctgcc
                                                                     1620
agacetgtet etgagecate tggggagget gggtaagatt tececegtea gggeetgage
                                                                     1680
cteateteca agetgetgge tteageceag etgecaceag egetgtetet gtettgeget
                                                                     1740
ttccagagag agactgactc attttgagct ccaggcctac caggcagccc aaccgcggca
                                                                     1800
gtaactgcct ctcacactga ggatggctca tgctctggtc cagccatggc ttgaacacct
                                                                     1860
cccaacaaga acaaagccag actcattctc cctagcatct tcttccttgc tcaaagatcc
                                                                     1920
cacaccccgt tagaagctgg aactgggtcc ttgtcacctt cctcacctcc ccagtcgtag
                                                                     1980
tetggttaat cettacatet caccaeggte accgtggeta gatgtgacet cegegatget
                                                                     2040
tcaggcacgt actagggcag cctgggcagg gctggtcact gtgatctcat gaggtgtgaa
                                                                     2100
cttgaccccg gccttctttc ctgggatgcc ggctaaggac acaagttcag tgtttgccct
                                                                     2160
ggettgtage ccageggggg etcegteate ecetggggaa tgeeteggee tgeaagaceg
                                                                     2220
cataccgcat tggaacaggg aaaccaccta cttcaqcacc tccctcaqca aqqtqqcaqq
                                                                     2280
teccaacaag cettgeacea egaggaagtg geagtggeat tegggataat ggeteeetgg
                                                                     2340
ccagcttgtg aagttcaagg ggcctcgtta ccttccttac agcctcacaa gatcctcccg
                                                                     2400
ggtcccagca caccctgagg gctgaccctc ccctcttgat tagtgcaggg gaaaagcact
                                                                     2460
ttaaaaagct gtgtcatgcc gtaacttgca catcttctga ttctgacctg aaactgcatc
                                                                     2520
ccaggtcggc acagacgcaa cccagtctcc tcccacctcc gagagtgcag tgtcctgaat
                                                                     2580
ggagaacccc agcacccaga agcatccact gaaggacgta agtaggacaa ggccaactgt
                                                                     2640
ggctgttcca gcagagggac tgtgggtgat gtttcccttc tctgatttct aaaatatctg
                                                                     2700
caaacttgtt tcatttataa ttgaaaatat aatttgcata acaacagtaa attctacaca
                                                                     2760
tgaaggcaaa cgtccgtggt tgacagaaat tacactggcc agaatcccca gtccccatga
                                                                     2820
ggettgteca gaegeagtga accagtegea getgataaca cacagaecat tecegatece
                                                                     2880
agaggtgcat ttcaggattc attctatttc atcagagacg gggtcttcct gtgttgccca
                                                                     2940
ggetggtete gaacteetgg getgaageaa tetteetgee ttggeeteee agagggttgg
                                                                     3000
aattgcagat gtgaggtact tetttgatag tgeetecatg catgeagaag atgaegtgga
                                                                     3060
gageteegeg eggeaeaggg eaggaagetg gtgtgeaete teatggatee gaageeaaea
                                                                     3120
cacgoctete aactgaggae tetgeceete tggeattett ecagecaeca geeetggggg
                                                                     3180
ccaggagcca ctgagtgggt cacacagcct tagagggcaa cgagggcagg agctcgccct
                                                                     3240
ggeggteece atgeagaeaa gagggteaet ggetteettg etttgetett eetqqaeate
                                                                     3300.
ttcctcgaca ttcatctttc catcctacca agagcgtgga aaccacaggg catgaggaca
                                                                     3360
ggcggagaca acgctggacc atctcacagc cacatcaaga ggctgcccac atcagggctt
                                                                     3420
tetacgtggt tgcaaggaac acaaacetgt gtgetecatt tgeccaetgg cactaggeet
                                                                     3480
cctgcccacc acccgcttct aggctattcg agccgcagga gctacaggct gctagagaac
                                                                     3540
cetgeggeag gatgetggge geggtteage ttttgeeagg gageageatg ggaetgggat
                                                                     3600
ttggaaggtg tacagtggct gegggettta geaggaggag tgtetacage acettetget
                                                                     3660
cctccaggta acctagtgtt tttatcagta tccattttcc tgtgtggatc tcttctgctt
                                                                     3720
gaaacctgtc ctgcctattt ttcttccctg gaccctgact gatacactct taaaacgaga
                                                                     3780
aaagggtacc gatttataaa gttcgtgaat taaaaactac accagtcatg gaaactcaat
                                                                     3840
gacatcactc aaagaaaatt cacaactcta gccttgagtt agctccctca atagtatgat
                                                                     3900
gaggtcatgc agatagaatc atacagttat taacaaaagt agttgatgtt aaccgagtaa
                                                                     3960
tcagttttat ctgtgttcct ttgagacaga gagagagagt gagaaagaga gcgtgagcaa
                                                                     4020
gtgagtgcac atactattgt taaagtcttc tctctaaagt tttaatatct gatataccat
                                                                     4080
aaacacccag ataaagaact ttagagaaac tggttaaaaa gatttaaaat tcccaactgt
                                                                     4140
aataaatccc taaaatgaat acccaaaaaa tgtttttaaa aaaaaaaa
                                                                     4188
```

```
<210> 5717
<211> 728
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (530)...(179) <223> similar to gil330342 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5717
attigtaacc titgatgaca ticttacgcc aagctiggca cgagggggag gaggtggctg
                                                                      60
gtcagcagte cacatetetg egteceeet ceccaegcat ccaeteeeet caegeegtgg
                                                                     120
ggcaaaaagg agggtgctgg ttgcgcgcgg agagcgcggt atgggtggcg aagtcccagc
                                                                     180
ctctacctag ccccgcgcta gtcgtgggtt ccctccagcc acccctctgg cccttcattc
                                                                     240
eggteeetee ceagaeggge ceteeteett teteatggae eeccaagagg cetetegegt
                                                                     300
tetececega aggaceceta tgectageca tggatectec attececace etecegtttt
                                                                     360
cccgtcccgc agacggagcc ggtccccagc cgccgccagt ctccggcctc ggatgttgac
                                                                     420
acaaacccga ggcggtttac actgagcggg tctggaagct ttcagggccc cggcaacacc
                                                                     480
tecteceege acttgggggt etececacag eeegggeegg eegeetggge tgeactqqeq
                                                                     540
tctgagagct cctgacacaa ggctgtggga aggaaccctt ttaagccaaa ctgggggcaa
                                                                     600
aaggggagcc agacatcccc gggctgggcc acgtgcgggg cagggacttc taaggatctg
                                                                     660
tegaaagteg gggeggaegg etggggattg geetaategg agegeggaeg etgaagagea
                                                                     720
gcggtgga
                                                                     728
```

```
<210> 5718
<211> 2892
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2481)...(452)
<223> similar to gi758066 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5718 ttttttttt ttggattttt atggactctt tattagggta ttaagatatt gaaaataata 60 cacgtaaacc acaaaagagt agcattccat tttcttqaaq tqcacatqat attatqaaca 120 atacaaatgc attattttta tcattaatag tttaatcatt aattatctca taagtcaatg 180 cagagagtga aattactatg aattaaactt ctgttcacaa tqtacaqtat tttqcatatq 240 ttgactttac ttaattgtac atttttgttt ccaaaqttaa tqttaaatac ctqqtqcata 300 ggttgttgtc aagcaattac tctcattgtc ttgtcataca tgctaacatt ttgctaaata 360 taaatctaca agtatcacag ctgcatatat ttctgaagtg gttagaacag aggaggatgc 420 tggaaagttg agttetttaa aatettegtt caaaacaaga gatttteate tatgteetet 480 tetttaatte caaageagtg geeceactee tteagggtga tgtgettate ettgttgggg 540 tcacactcct caaagaaacg ggttatgcag tgttccatgg gcaccagaga tgctcgcaga 600 ggagcaagtt cagaatgtgt caagactcta tccatagggt gttggtcaag ttcactaaac 660 tgccagtgca caggatacac atacatgtgg tagtttttct taaagtccct taagagaaga 720 tcaatgggat ggtccccagc caaaagcctc ttttcatccc aggtaaattt tcttgacttt 780 atttctctgg cttctcattt agataaccag catgttcaga gttggcttca taaaqctqca 840 tgaggatatt cttgagccca gtctctcatc cgtagaggaa acttgaatca cttcaaagtc 900 ccgacaaagt aggaatagat ttggaggctt ccaaaataat ccaqctqqaq ttqatqccc 960

```
tttttggtcc cctccagtct gcatttagta gcgaatagat gacaggaact agcataggtc
                                                                     1020
tgattgtcag tgccgcaaac ttgatcaagg ggttttgttg gaggaccaag tcactggatc
                                                                     1080
ctggcaagac acaagtgagg tttttccctg ttggtctgcc ttacagatgt ggcctctttt
                                                                     1140
acactggaag ctcatgcaag aatccacage atgcaccect catgttgeet teaettgaeg
                                                                     1200
tttcctcctc atttgatgag ttctctqctt tcttggcctc ttggtgctct ccaggetcag
                                                                     1260
tggtacctat attiticatit tcatgtactt tttctctttg ctccctcaat tttgaaggtg
                                                                     1320
aataggcaat ggaatgaagc tctctcggcc tcccagaaaa ggcctggctt gggatgaaag
                                                                     1380
tagtcatcac attigcactgt geetggggee atcagtgeeg ceatcatege catcatcate
                                                                     1440
gecateatea teaacteeat gatttetggg egtggtatta ceateateag taggtteeat
                                                                     1500
gageagagee teagaaacag tettttette tgtetetttg tggttgetga tagettetag
                                                                     1560
gecagtitta cectetigae teligecatic agiltetiga algigettat igaegitega
                                                                     1620
tgcattttcc tcttccattt ctgcattgga gttatcttct tgttcttggt taccctgatc
                                                                     1680
aaattcatcc teetgeatet tgettaettg agttggttga teagaetett eeaaaatate
                                                                     1740
atcagattgg gtattgtett cetectgett getgttagea tgetecetgg geaatttetg
                                                                     1800
fettiettie tiggitatea tigigggiae caaetteace iggetettit tettetteet
                                                                     1860
cttctccatt ggaaatattt ggatcctgct cttggtttcc ttgatccctt aggccttggc
                                                                     1920
tatgtttact geteetgtte aactgatgat gtgaataatt tetaggttgt tettggtttt
                                                                     1980
cctctctctt tgtgatactt tcttgttggt tagaatctgt gaaggaacta acaccaggag
                                                                     2040
ccaaaaaatc agtgttctct gagagttttt tctcctgagg ctcactcata tcttctttta
                                                                     2100
tgtccaatgt accettcaag ttggtgccat acteccaaat tecacaetta aagtgaceca
                                                                     2160
teactgreed tettgaatee treaareece agetettgge cragaacter tgeceetqtt
                                                                     2220
etgetgactg tteatggett teetettttg actttagtae tgatgatttt teageettat
                                                                     2280
ggtgggaate gtettetgtg gataetgetg titetitite attitettea getteageee
                                                                     2340 .
ttaaactggg gattgcagtg ttgtcgggtg ctaccgtttc agcagttggt ttggaatgat
                                                                     2400
cagataataa tettgeattt gtegggattg cagetgeagt teccaagaga cataggaaaa
                                                                     2460
aaageeeagt etteatgett teeagatett taagtaaggg getggaeeea gageeaetge
                                                                     2520
agaaaaattg aagttgaatc ccctctgcac acagacaggg aataaaagtt tgacaaacac
                                                                     2580
ccaagaaaaa ctctttaaat ccctttcctc gttagctctg cttctttgcc cagaggcata
                                                                     2640
ttcaagtcta ctggagttga aattctgctg ctctgtcaac tagtgggggt ctgaagtgac
                                                                     2700
agacgagaat tiggaggitg gcaccagaga gtatticaga cigicategi tittigitigca
                                                                     2760
gatteetgga titeeetage aggetggeet eteatgegag ggetttaeag geagtgettg
                                                                     2820
caaaccaaaa gggaaagagc taattctggt ggcgtggatg gggttaacag tcttcccccg
                                                                     2880
gacgcgtggg tc
                                                                     2892
```

```
<210> 5719
<211> 1692
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1693)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> in = a,t,c or g
<220>
<221> misc_feature
<222> (1550) ... (563)
<223> similar to gi4584796 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5719
ttttttatca ttgacaatgt ttattatcaa gaaactttag gttttttaaa agaatgctcg
                                                                       60
ttttagaata caccaagagg acactctgtg acaggacata tacaaacaag gataattaaa
                                                                       120
atattaaata ctatctaaat taaaagacca taattcaaat tgctaattat aatatttgtg
                                                                       180
teggtagaaa taactatagt teeeetteat gaaatteace eccaegttet catgaagaet
                                                                       240
atgacgicte accacaattt cagttattta atttacaata atcaatgetg agttttetgt
                                                                       300
gctgaagcat gcactgttac agaaagcaca aaatcctatt tacagggatt tttagttttc
                                                                       360
tttaaaatgt atctcaagca tcttttaaag tgcgagctac aaataggttg tatccttaat
                                                                       420
gaaaaaggct tctttctaaa agaagtatgg agataggcta tccaatactg cnggcaggaa
                                                                       480
cagitatata actaaccgaa ggaaccagca gcactctgct aactctgttt tagtgtagca
                                                                       540
acctecttet tggtgtteta etaccageca aacatgtact ecattgettt ggatacaaga
                                                                       600
ctttcatctt tttttggcgt ttgtctgtca gaaataacct gataatcact agtagaggct
                                                                       660
ttgtatgctg tagcaagagg tctcatggta gaaatcctag gagtacttcc aggttgtgtt
                                                                       720
ggtgtaccta gagttttgat tggtggtgta aaggctaaag atggagatga taaagcacat
                                                                       780
ctgtcactgc tttccataac acttttgtca atacatggtt ttacaccaat catgatggat
                                                                       840
totocaaaaa tootoccato titigottaag gotttoogag cotgoagitt agattgataa
                                                                       900
cgaatatgca tocaatttcc tgtattagac atccacatgt tttaagatat tcccccatac
                                                                       960
tgtgcaaatt gtaagtaata tgtaggaaag cagatgcctt gaggaaaccc caaatacagt
                                                                      1020
caccccaaga gtcatcgagg gtgatcttct gaagtcaaag aatctccttg agtataaaaa
                                                                      1080
ggatecaact gggcaggaga taatgtegte tttegtgget gacegataet tgetggaeta
                                                                      1140
aacatactit geeetgitee aggagtagat gtaacteeaa caagaggaet etgeattact
                                                                      1200
gaaatgtttg getgtettet tgaagttaaa ggtgttgate caagteetgg getagaaatg
                                                                      1260
teateatata taettetaac tggtggageg ceaettttat etttatgage tggtacaact
                                                                     ..1320
ggttgtggtg gtgacccacc tgcaagtaaa ggtgatctca tttccattac tcctactgaa
                                                                      1380
gggccactaa ttgatcgagg ttgtggagtc accggagctg gcaaatcccc cattaaaaat
                                                                     1440
ccaggtaaga actgggcatt aactcctggc tttggagatg tgggtgaacc cagcatcatt
                                                                     1500
ggttcagate ctaacgeggg cecetgaggt tecactgeaa aggetgecat tgegteggea
                                                                     1560
actacactta aaaccagtac cttcccaatt aattttcaaa aatggcggaa accggacgcg
                                                                     1620
tgggcggacg cgtgggcgga cgcgtgggtc gttccagggt tatcagtcgg tacgcagget
                                                                     1680
ttcagtggca ag
                                                                      1692
```

```
<210> 5720
<211> 3593
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3594)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (105)...(3593)
<223> similar to gi38458 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5720
acgccgccgc ctgtgtcatc cgccattttg tgagaagcaa ggcggcctcc acgtttcctg
agcgtcttct tcgcttttgc ctcgaccgcc ccttgaccac agacatgtct cgggatcggt 120
```

```
teeggagteg tggeggtgge ggtggtgget teeacaggeg tggaggagge ggeggeegeg
                                                                      180
geggeeteca egaetteegt teteegeege eeggeatggg ceteaateag aategeggee
                                                                      240
ccatgggtcc tggcccgggc cagagcggcc ctaagcctcc gatcccgcca ccgcctccac
                                                                      300
                                                                      360
accaacagca agcaacaagc caccaccgca agcagccacc gccgcagcag ccggccaccg
cateageeeg eegeegeate cacaageneg cateageage ageageegee gecacegeeg
                                                                      420
caggactett ccaagecegt egttgeteag ggaceeggee eegeteeegg agtaggeage
                                                                      480
gcaccaccag cetecagete ggeceegeee gecaeteeae caaceteggg ggeeeegeea
                                                                      540
gggtccgggc caggcccgac tccgaccccg ccgcctgcag tcacctcggc ccctcccggg
                                                                      600
                                                                      660
gegeegeeae ecacecegee aageageggg gteeetacea caceteetea ggeeggagge
                                                                      720
ccgccgcctc cgcccgcgc agtcccgggc ccgggtccag ggcctaagca gggcccaggt
ccgggtggtc ccaaaggcgg caaaatgcct ggcgggccga agccaggtgg cggcccgggc
                                                                      780
ctaagtacgc ctggcggcca ccccaagccg ccgcatcgag gcggcgggga gccccgcggg
                                                                      840
ggccgccage accacccgce ctaccaccag cagcatcacc aggggccccc gcccggcggg
                                                                      900
eccggeggee geagegagga gaagateteg ggacetegga gggggtttaa agecaatttg
                                                                      960
tetetettga ggaggeetgg agagaaaaet tacacacage gatgteggtt ttgtttgttg
                                                                     1020
ggaatctacc tgctgatatc acggaggatg aattcaagaa gactatttgc taaaatatgg
                                                                     1080
gagaaccagg agaagttttt atcaacaaag gcaaaggatt cggaatttat taagcttgaa
                                                                     1140
tctagagctt tggcttgaaa ttgcccaaag cccgaactgg gatgatacac cccatgagga
                                                                     1200
ggtagacage ttecgagtte getttttece acacatgeet geetgeeeet tteetgttee
                                                                     1260
gtaatetttt caccetttat gttteeceaa tgaaactgtt ggggaaggaa geeetttagg
                                                                     1320
cccaatttgg gtccccattt gaaaggggct gtttgtaata ggtgggatga tccgtgggaa
                                                                     1380
ggtcctacag ggaaaggcca ttgtttgaat tttgcttcct aagcccagcc agcaaacaaa
                                                                     1440
ggcattttgg aacgatgcca gtgaaaggtg tttttcttta cttgacggac aactccctcg
                                                                     1500
teccagteat tggtggaace caettggaac caactagatg attgaagatg ggtetteett
                                                                     1560
gaaaaacttg ccccagaaag aaatccaatg tatcaaaaag gggagagaaa cccctcctcg
                                                                     1620
gtttttgccc cagcatggca ccgtttgagt acgaatattc tcagcggatg aagtcctttg
                                                                     1680
gatgaaatgg aaaaacagca aagggaacaa gttgaaaaaa acatgaaaga tgcaaaagac
                                                                     1740
aaattggaaa gtgaaatgga agatgcctat catgaacatc aggcaaatct tttgcgccca
                                                                     1800
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                                                                     1860
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<212> DNA
<213> Homo sapiens

<220>
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<222> (50)...(9391)
<223> similar to gi1661108 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<212> DNA
<213> Homo sapiens

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<223> similar to gi403144 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5722 geggtggaat teegaggatg geegteatgg egeeeegaac eeteeteetg etaetetegg 60 gggccctggc cctgacccag acctgggcgg gctcccactc catgaggtat ttctacacct 120 ccgtgtcccg gcccggccgc ggggagcccc gcttcatcgc cgtgggctac gtggacgaca 180 egeagttegt geggttegae agegaegeeg egageeagag gatggageeg egggegeegt 240 ggatagagca ggaggggccg gagtattggg accaggagac acggaaagtg aaggcccagt 300 cacagactga ccgagtggac ctgggggaccc tgcgcggcta ctacaaccag agcgaggccg 360 gttotcacac catocagagg atgtatgget gegacgtggg gteggactgg egetteetee 420 gegggtacca ccagtacgee tacgacggea aggattacat egecetgaaa gaggacetge 480 gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gagacggccc 540 atgaggegga geagtggaga geetacetgg agggeaegtg egtggagtgg eteegeagat 600 acctggagaa cgggaaggag acgctgcagc gcacggacgc ccccaaaacg catatgactc 660 accacgetgt etetgaceat gaagecacee tgaggtgete gggeeetggg ettetaceet 720 gcggagatca cactgacetg gcagcgggat ggggaggacc agacccaagt acacgaagct 780 cgtgcagacc aggcctgcag gggatggaac cttccagaag tgggcggctg tggtggtgcc 840 ttctggacag gagcagagat acacctgccc atgtgcagca tgagggtttg cccaagcccc 900 teaccatgag tatggtagee gtetteecag eccacegate eccategtgg ggeateattg 960 ctggccctgg ttctcctttg gaagctgtga atcactggaa gctgtggtcg ctgcctgtga 1020 atgtggagga aggaagagct caggtggaga aggggtgaaa gatagaaaag ggggggagct 1080 actetteaag getgeaaage eagtgaeaag tgeeeagggg etetgaatgt gteteteeae 1140 aagctttgta aaagtgttga gacagcctgc cctttgtgtg ggactgatga ggcaaagagt 1200 ttgttccctg ccccttcccc ttgtgacctt gaaagaaccc ctgactttgt ttcctgcaaa 1260 aggcaccetg catgtgteet gtgtteegtg taggecataa tgttaaggag gttggggaga 1320 eccacececa ecceecatgt eccacecatg acceptette eccaegetga ectgttgete 138.0 cctccccaa tcatctttcc ctgttcccag agaggtgggg cttgaggtgt ctccatcttc 1440 tgtcttcaac ttcatgtgtg cactggagct gtaaattctt tccttcccta ttaaaattta 1500 gaacctgagt ataaatttac tttctcaaat tcttgccaat gagaggttga tgagttaatt 1560

```
<210> 5723
<211> 845
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (652)...(799)
<223> similar to gi21992 in the genepept database release 114
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5723
ttttttttt ttggaacctc gggccacaca gctcaggcac acaccatcgg ggctactggc
                                                                       60
tgcttggagt ttattttccg cttggtgcca ggtgcacagt tccaggtgtc aggaaagcta
                                                                      120
gcgagtgctg gggccgggcg gtagagagcg gggctctcac tggtttttgg tgtctgctgt
                                                                      180
gttgatgcga aggtctgctt gctgcagccg cctagtttac agggtggggg gtgggaggtg
                                                                      240
gggagggggg cgagggatgc ggagtgggga gaggggcggg gaggggctct ggtggactag
                                                                      300
cgcctccgca ggccgtgggg ctcggtggta accgctcagg tcaggacggg ggcccagcgc
                                                                      360
tggctgtgct ggactgaccc cccgggtctg cttcctcggg gcgtcccgag cccaggccac
                                                                      420
aggeggteat getgetggag geetggggag gtteegagtg etetgeggae teeaacaceg
                                                                      480
tggcccatga acgggaggt ggacttcccg aaaaagaagc tggcccacca atgacccqqq
                                                                      540
teageettgg ggagacetgg ggggtgggga atggetteee eggggeacte ggtactgetq
                                                                      600
caggagetgt tgctggaagt ggaacccagg cggcgccggt aqtaqtcqtq qqtqqccacq
                                                                      660
agegageege tggaggggat ggeegeeatg etttagettg etqqetqqtq qqatetqqqe
                                                                      720
ggcgacccct cgcgggcctc ggcgcacgat cacgggtggc ggggacgggg gcggctaggc
                                                                      780
cacggagece atttgcagag aagacegegg gaageegege cacgacagag aggegegege
                                                                      840
ggggt
                                                                      845
```

```
<210> 5724
<211> 1555
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1211)...(294)
<223> similar to gi4928064 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
tttttttttt ttcacacacc agcacgtccc acctcgtgct cacggatttt attacacaga
                                                                    60
tagtggcggc aatggcctca gcccagccca ccctcacctg cttttccagc ccacaaaggg
                                                                   120
ggacgatcac ggcccagcaa aagcgatgct gagaggggaa acagtccaga gtccaacagc
                                                                   180
agaacttggg ggaagcggtc ggggtggcca ggaacataaa ctatgtatag gggccggggg
                                                                   240
cttctgccca gggctcccct ggaccaggac gccaggtagg gcagggaacc tcagtagtcc
                                                                   300
tccacccage catteteaga gatgaatgeg teaataacet cetteatage caagttgggg
                                                                   360
atgagetgtt cetgggteag ggggeteegg gteaeggggt caaaatgace cacaegetge
                                                                   420
aggtgeteet egatgteett geggtegtag gtgatgeeae tgggegtgat geaeggetee
                                                                   480
cgcatcagct caaagctgat cttgccacac aggtagtcgg ggatgtctcg cttcttcctc
                                                                   540
tteteateca ectgagaaaa aagetegtee atgteegeea tgtaettgte gtgettggee
                                                                   600
tcaatgcagg cctgctgggc ccggacgtgg ctgtcgtcct catcaccctc gtggtttcgc
                                                                   660
tagetetett ecageteeet eteacegett eegeggeatg aageetggag aggtaggagt
                                                                   720
gcagctcgct ctcctggtgg atgcgccgct cctcaatgct gttccagcgc ttcttcttcg
                                                                   780
cgaattcgaa agagcgcttg ggattgtcgt tccccgaagt tcagccgctt gttcctttgq
                                                                   840
ccaggetgta agetegetge agattggega tggeeteate atagetetee atetecaget
                                                                   900
ggcactgccc caggaagaag tgcgccttca cagactgccc gtccagctcc agggcgcgcc
                                                                   960
ggcagtcggc cagggcctgc tcgtgctgct gcatcttcag gtagcacaag gcccggttgg
                                                                  1020
tgtaatacac ggccaccagc gggttccggg tgatcgcgcg gccgtagcag gccgccgcct
                                                                  1080
eegggtaett teggeeeaeg aacagaegat tgeeetgete ettgagetee tgegegeteg
                                                                  1140
ggetettete ggggetteeg eegecagege eeageegtge geegecetee tteteeteet
                                                                  1200
tgcccttcat ggcgccgcgc ggcacggcct gggctccgct cccaagctcc gcgcctcgcg
                                                                  1260
1320
aggtecece geeggaaett eeggeegggg gegggaeeag eggggaegea egegtggggg
                                                                  1380
cgagtggggc cgcgcgtgcg cccaaccagc ctggacgggg acactgggcc cgcgacgtcg
                                                                  1440
ggggctggga ggaacgctcc agttccctgt ccccgcgctc ttaagggtgg gcgttcgcgt
                                                                  1500
aggecetgge etgecetget gaggtetett eggeaceege eteggeggeg geege
                                                                  1555
```

```
<210> 5725
<211> 743
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (570)...(131)
<223> similar to gi5104682 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5725
tttcgtcggg cctgaacttc cagggccggc tactcctcgg cagagcgacc gcgcggtgtc
                                                                       60
tcagagegeg geeeggagee geactaagag egetggaegg egggagagag geteggagga
                                                                      120
coggtagete ccageaaage ggeecagegg atgtegggag etatettegg geecetggag
                                                                      180
ggcccgagct ccctggatgc cccgagcatc cacccgctgg tgtgcccgct gtgccacgtg
                                                                      240
cagtacgage gecegtgtet tetggaetgt ttecaegaet tetgtgeegg etgeetgegt
                                                                      300
ggccgcgcga ccgacggccg cctcacctgc ccgctgtgcc aacaccagac ggtgctgaag
                                                                      360
ggtcccagcg ggctcccgcc ggtggaccgg ctgctgcagt tcctggtgga cagctcaggg
                                                                      420
gatggcgtgg aggcggtgcg ctgtgccaac tgtgacctgg agtgcagcga gcaggcaggg
                                                                      480
geggeaggge gggtgggtga ggageaaagg gtacceggtt geacagtece caatgettge
                                                                      540
acatgcactc agcatgtctt cagaggacga cctggcagtg gattctccag cacctcccta
                                                                      600
gggcacettg gccccaaatg tgaaccccat tataccggtg gggagactga ggtccagaac
                                                                      660
```

```
aagggacttg agccagtgtc cagacagtgg cagaggctaa ggccattcga tctggggaga
                                                                       720
gctcactggt ccccaattca ggg
                                                                       743
     <210> 5726
     <211> 946
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(947)
     \langle 223 \rangle n = a,t,c or g
     <220>
     <221> misc_feature .
     <222> (875)...(14)
     <223> similar to gi296669 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5726
cegeegggtg egeggetteg eegeeegagg tegttegget egggtaeeat eeteegegee
                                                                       60
atggacacca gcgacctgtt cgccagctgc aggaaggggg atgtgggccg agtgcggtga
                                                                       120
ggacetegea gteeegggga gggtgeggga ggtggeegee eteggaaege eteggaeeet
                                                                       180
gggacgggcg gctgggcggc cgcggagagg cgggcgcctc tgccgggtca cagccctcgg
                                                                       240
agegeeeceg eggggeagae eacceggace eccgeegeag ecceeeageg gaagegeget
                                                                       300
ggggcgggga cactgatggc cattgacccc cggagggctt cctgtaagaa gggactgctc
                                                                       360
ageggaggte egaaggegea gaagtgggeg gagagaagge gggeeaetgt tegeeetggt
                                                                       420
agggcccgga cgtcagaccc cccgggcgca gggcgcgggt ataggcctgg gactccagac
                                                                       480
gtggccctt tctctcgtgc tctctggacc tggcgcgggg aacacctaga gcccataatc
                                                                       540
ggcctccggt ccctgaggat tcggaaactc ctgacgcagc taaagtgaat ctggcgctga
                                                                       600
gatgccccct ccatgggccg gacgcggagg gaaggggtgc ccagttgggt tctggggccc
                                                                       660
ttcccctcct tgggcttcca ctatcccgtt tgacctcctt ttttcttggc ccttcctccc
                                                                       720
cettgacetg gtgctgactg actgcttcca ceteceetgg getggegeeg ggetgetgta
                                                                       780
ctcccgtage etccctggge egetecetga catcccgtge cactcaagag ttagtgcata
                                                                       840
gtgtcaacgc tgagtgggtt cacagcactt ccaggtgcag cctggaggcc tcctttgggc
                                                                       900
tgcccccgcc acgaaatcgt cgacccggaa attccggncg ttgtat
                                                                       946
     <210> 5727
     <211> 2338
     <212> DNA
     <213> Homo sapiens
```

<223> similar to gil707262 in the genepept database release 114,

<220>

<221> misc_feature <222> (934)...(1411)

Run with FASTXY 3.3t00, default parameters

```
<400> 5727
tectgaatte cegggtegae gatttegteg geggeeegeg geggaeeatg geeetggeee
                                                                       60
ggcgtcgctg ggctttcctc acggcgtccc cgagcagcgt cgcagagcgg gccgacttcc
                                                                      120
gggaaggaac tgaccagcga ctgagcggcg gccggcgcgc ttagcgccct gaacatgcgg
                                                                      180
cagtccctgc gggcgacccc gggctccgga caggcggcgg cggaggcggc ggctcgggag
                                                                      240
ggaaggaggc ggcggcgccg gcggaggtgg cggcggagac ggccggcgcc cggcgcgag
                                                                      300
ccctagggag gcagttcagc gcggcctcgg gcctcgtcga gaaggatgct gtcccgaaag
                                                                      360
aaaaccaaaa acgaagtgtc caagccggcc gaggtgcagg ggaagtacgt gaagaagqaq
                                                                      420
acgtegeete tgetteggaa tettatgeet teatteatee ggeatggtee aacaatteea
                                                                      480
agacgaactg atatotgtot tocagattoa agocotaatg cottttcaac ttotqqaqat
                                                                      540
ggagtagttt caagaaacca gagtttcctt agaactccaa ttcaaagaac acctcatgaa
                                                                      600
ataatgagaa gagaaagcaa cagattatct gcaccttctt atcttgccag aagtctagca
                                                                      660
gatgtcccta gagagtatgg ttcttctcaq tcatttqtaa cqqaaqttaq ttttqctqtt
                                                                      720
gaaaatggag actotggtto cogatattat tattoagaca attitittga tggtoagaga
                                                                      780
aagoggocac ttggagatog tgcacatgaa gactacágat attätgaáta caaccatgat
                                                                      840
ctcttccaaa gaatgccaca gaatcagggg aggcatgctt caggtattqg gagaqttqct
                                                                      900
gctacatett taggaaattt gactaaceat ggttetgaag atttaceeet teeteetgge
                                                                      960
tggtctgtgg actggacaat gagagggaga aaatattata tagatcataa cacaaataca
                                                                     1020
actcactgga gccatcctct tgagcgagaa ggacttcctc ctggatggga acgagttgag
                                                                     1080
tcatccgaat ttggaaccta ttatgtagat cacacaaata agaaggccca atacacggca
                                                                     1140
tecetgtget cetaegtgta ceteggtatg atcaaceace teetgteaca taccageeac
                                                                     1200
agcaaactga aagaaatcag teeettetgg tacetgeaaa teeatateat aetgeagaaa
                                                                     1260
ttcctgactg gcttcaggtt tacgcacgag cccctgtgaa atatgaccac attctgaagt
                                                                     1320
gggaactett ccagetgget gacetggata cataccaggg aatgetaaag ttgetettea
                                                                     1380
tgaaagaatt ggagcagatt gttaaaatgt atgaagcata cagacaagcc cttcttacag
                                                                     1440
agttggaaaa ccgaaagcag agacagcagt ggtatgccca acaacatgga aaaaattttt
                                                                     1500
gagctgattt tttaaaaaatt taagttttgt aagagcttta aaatattttc acagataaaa
                                                                     1560
aattgcaaac aagtactctg gttaataaat gctgcttcct ttgtggaaat tataaaattc
                                                                     1620
taactttaca tgtattttgt tattagaaat tttcttttat tgaatgagaa aaattagtct
                                                                     1680
atcattttaa gagccaatat ggcaaacact ttcaaatact gtatattagg aaactqtttt
                                                                     1740
ggtattcttg atggaaaaaa atgcagcgga aatgtcatta tgaacagatg ttaaatagga
                                                                     1800
aattattact tgttaacttc ttacagcagt agtaccttct ttaaaaaaaa aaaagaatct
                                                                     1860
gcggtatttt tttaaaaaaa aagtttactg ctgtagtgtg aaatattgtc tggaaaggga
                                                                     1920
tggtttaaat attaccatga tgtagttgaa atataaaata ggatttggaa ccttattgtg
                                                                     1980
ataaatattt atatatgatg tatgtttgtc tcccctctcc aaagtaagga acccagctgg
                                                                     2040
gcgtggtggc tcactcctgt aatcccagca ttttgggagg ccgaqqtqqq tqqaccqctt
                                                                     2100
gagtccacga gtttaagacc agcctgggca acatggtgaa gccccatctc tacaaaaaat
                                                                     2160
acaaaaaaat tagccgggta tgatggtgtg tgcctctagt cccagctact tgggaggctg
                                                                     2220
aggtcagagg atggcttgag cccaagaggc agaggttgca gggtcaagat cgcaccactt
                                                                     2280
gcactgcagc ctgagagaga gagagccaga ccttgtctca aaaaataaaa aaaaaaaa
                                                                     2338
```

```
<210> 5728
<211> 1055
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (514)...(1046) <223> similar to gi3337385 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5728
aagtcagcag gcagtaagca agatgaggaa tcaatatagc aacagtttgg atcagactgt
acagtttttt tttgtttttc tgagatggag tctcgctgtg tcacccaggc tggagtgcaa
                                                                     120
tgacgtgacc ctggctcact gcaacctccg cctcccaggt tcaagtgatt cccctgcctc
                                                                     180
agecteeega gtagetggga ttaeaggtge etgecaceae geeeggetaa ttttttgtat
                                                                     240
ttttagtaga gacggggttt caccgtatta gccaggatgg tctcaatctc ctgacctcgt
                                                                     300
gatecateeg eccegeeete ecagagtget gggattacag gegteacaeg egetgacegg
                                                                     360
ctcagactgt actcttctag ccatctgaaa tacgttttct aggtagagat agattgtgta
                                                                     420
agggtacagt tatgaggata acagaaacgt ggcagattat ttaaaatcat cctgaaagtg
                                                                     480
gtgctttatc tgatgaaagt gattgtaatc cataggaaaa tgtttcaacg tgcgcaagag
                                                                     540
ttqcqqtqqc qqqcaqaqqa ctaccacaaa tqcaaaqctt tttcaqatca cccctctqc
                                                                     600
aagaaagcct ctttgcaact gggtcagaat ggcggcagcg gagcatcgtc attcttcagg
                                                                     660
attgccctgc tggccctacc tcacagctga aactttaaaa aacaggatgg gccgccagcc
                                                                     720
acctecteca acteaacaac attetataac tgataactec etgageetea agacacetee
                                                                     780
egaatgtett ettatteeet ttecaceete teetetteea eeeteegtgg atgataatet
                                                                     840
caagactcct cccttagcta ctcaggaggc cagaggcaga aaaatcactg aaacccaaga
                                                                     900
ggcagaggtt gagtaagctg agaacaggtc attgcactca agcctgggca ataagaagaa
                                                                     960
atgtgtgagt ggaacaaaag aaaaaatca aaaaacaaaa caaaacccac actccaaaaa
                                                                    1020
caaactaaca aagaataaat aaataatata aaaat
                                                                    1055
```

```
<210> 5729
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1221)...(224)
<223> similar to gi1707507 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5729
tatggcacga gtcagaattt atctatttag agataactta aatacaacac agaaqctaaq
                                                                       60
caggitetta aaattactgg tgtetacaaa etgeetgaat tittigtetit getagitagi
                                                                      120
ttcaccetge actgetagaa agaagcaaca acagtcagta tgtcattett caacatttaa
                                                                      180
tggtgccaca gggttaaata atggccttac ttttttggcc tgaattttqc caaaattaqc
                                                                      240
ttcaaactct ttttttgatc catttagatt tgctagatgt ccatccttta ttctgtagcc
                                                                      300
tgaggaattc agtttcctta tcctgtactg tactatctgt ggtgttaatt caagaaccat
                                                                      360
tggcgtctct cttatctgag ctatggaaat tccttctctc aataatcctt qcattctctc
                                                                      420
ttctaaaact ggaacagaat aatataaaag ggcaggacat ttcaaaacta attgcttcag
                                                                      480
gtcatgatct gtgcatttaa aagcattttt agagaaggaa atactattct gtatacttct
                                                                      540
tgggcaaagt tgaaaaagaa atcctttgag tttggataga agctggagaa tttcaaagct
                                                                      600
ggtgaaacct tgctcctgga gaaattctag tgtttccttt atagctgtgg gagaatttaa
                                                                      660
```

```
caaaataaat gggttttggc ttaacaattt tagtagccaa actttcatgt tggcctcaga
                                                                      720
gccacctaca tctagataac tctcttqgag aattcttacc atttgcttat tcttctcaac
                                                                      780
aggattatga aaaacattag qtqcaqctgt caaaagtctg ctaatgacca cattttttaq
                                                                      840
tcccaactct tgaaagaact gaacattcag cttctggttc tcttggtctt taatagtaaa
                                                                      900
gaaagattot ggaaactgot ctattaactt gattaactot tootcatttt tgcagaccaa
                                                                      960
ctgccagagt tttctctggg tgttaacagc ggttggacta cagacaattg cttccgggca
                                                                     1020
gegttecaaa atactggeta cageagtete ateggeacet agttettgta aaatattege
                                                                     1080
aatttcttca acataggttt catcctctaa aagtacccat ccttttaatc tacgaatttt
                                                                     1140
cctaatgtca actgaacatt tataqaqctt ttccactgtt cttgtatttt ctttgctcqa
                                                                     1200
ctgtttatca gttgtatagg tgaagcatgc taagaaaggt ctgtattttg gaggtgatcg
                                                                     1260
catcititetg aaagaacaca geetgeagga etgggatete ageageaget tecacaacat
                                                                     1320
ggctgcaatc tactagctag tttccaccgt cctgggactt aaatggactc attctatctt
                                                                     1380
acagtetete eccacagate tigteeteat ecagatatic agiteateca etigggatic
                                                                     1440
tttccaactt cttctcaaaa tgtgatcttg tcagttccct gcaataaacc gtcggcgtca
                                                                     1500
getecaagea aggeacaggg agtecegggg gecaggeece gteetteeet eteteteegg
                                                                     1560
ccagectece caeagteege agteecegag geetggagee gggatttegg teeteggtet
                                                                     1620
caagaagete eegacagtte te
                                                                     1642
```

```
<210> 5730
<211> 3005
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3006)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2534)...(1270)
<223> similar to gi4884303 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5730
ttgaagttta ggtaacattt cctttcctca aaggataaat gattcagaag gaatatatgg
                                                                       60
taattatgta aaaaaacaaa aacaaaaaac cctcatgttt cccagtttta accgtaaaaa
                                                                      120
cagaaatcct taaaacacat acatacactt aggaggaaaa aggagatgaa tgcccaatgt
                                                                      180
ccattagcaa gtgttaccga ctaattctat aatctagttt tttctagtta tatcccaaaq
                                                                      240
ttcccaagtt tagtcctaaa attttctttc tgtacattta cccatttqaa caacatcaac
                                                                      300
attaaataac taaaacaaga tggtccataa aattctttct atagattgtt ggctgaaagt
                                                                      360
ctcatttcta aaactagtac ttcagtattc cgaaaagctc tctctgcgtc ttttcatttc
                                                                      420
tattagtatg tttaggacat aaagcattaa aataaqqcta ctqctaatqt accaaaatcc
                                                                      480
atgttccaga aaggaaaaaa aaaaactaat aattatcatg tttgaaaggt atgtatttta
                                                                      540
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tggcg
                                                                    3005
```

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<210> 5731
<211> 5889
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5890)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4760)...(694)
<223> similar to gi3882297 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<211> 2716

<212> DNA

<213> Homo sapiens

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<210> 5733
<211> 2022
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1293)...(722)
<223> similar to gil276645 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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cegeettgge tttettggeg ceetceagee teetettggt gttetteaca gacagtgggg
                                                                     1320
aaggettget eeetttaeet tetttggggg atteeaetag aateagaaca agaggttaaa
                                                                     1380
agccaaccac aaaacactct cccaataaga aacaagttcg tagagcgaga taaggcccct
                                                                     1440
ctacaggica tacagcgacg caagcagact giaacticcg gctcccagct gggacccaga
                                                                     1500
acttacacag acatcacaga aatgcagatg gggctggacg cgggggctca cgcctgtgag
                                                                     1560
eccageactt egggaggeeg aggagggegg atcacaaagt caatacattg agaceatect
                                                                     1620
gcccaacatg gtgaaacccc atctctacta aaactacaaa aattagctgg gcttggtggc
                                                                     1680
acgcgcctgt agtcccagct actccagagg ctgaagccag aagaatcgct tggacccagg
                                                                     1740
aggcggaggt tacagtgagc cgagatcacg ccacagtact cacctggcaa cacagcgaga
                                                                     1800
ctctgtctca agaaaaacaa aacaaacaa aaaaacccca aaacatgtga gtgtgtct
                                                                     1860
ctctctctc ctctatatat atatacat agacacacac tcacacacaa attacctgag
                                                                     1920
cgtggtggtg ggcgcctgcanatcccagcta cttgggaggc tgaggcacaa gaatcaccag
                                                                     1980
aatctggtag gcggagcgtg cagcctcgtg ccaagcttgg cg
                                                                     2022
```

```
<210> 5734
<211> 2296
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1947)...(1305)
<223> similar to gi5921473 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5734
cgcaggcacg tgctaccacc acgcctggct aatttttagt ttttttacag aagcgggctt
                                                                       60
ttgccatgtt gtccaggctg gtctctactc ctgggctcaa gcagtcctcc tgcctcagtc
                                                                      120
teceaaagtg etggaattae aggggtgagt tgetgegtet ggtgttggtg aetttetaga
                                                                      180
gattactttt tggtttacat cattttcctt gtgactattt ttactttttt ggggggcggg
                                                                      240
gggacagtet tactetttt agtttacate atttteettg tgactattet atttttactt
                                                                      300
ttttaggggg cggggggaca tgagteteac teatgttggt caggetggte teaaacteet
                                                                      360
gacctcagtt gatccacgcc cttcggcctc ccaaagtgcc gggattacag gcgtgagcca
                                                                      420
ctttgcccgg cctgtatttt tacgttttaa taaatccccg tatttttgtt aaaggctggg
                                                                      480
taacctgact cetecectca tttetactge aaaataggag tacactgggg ceteceagtg
                                                                      540
gagetgttet etgetgtttt aaattacttt etacteetee etttetaacq tecacteetq
                                                                      600 ·
gacticattig tragaticaat atatactggg actigtigtigt tittettigag tigtactagat
                                                                      660
ctctttccag aagagettee ettgatecag atetecetaa ttgggaatga tgatttcaca
                                                                      720
gactagagtc teegatgetg gteatgatgt caaaactaag ttetgactea tttagggaac
                                                                      780
tggatacttg ggtctccaga agggccaatg ggagggccat aattctgttt attttcaaat
                                                                      840
tgtcttgttt tcaccttgtt agaatgaact ctggaagccc agccagggac aatgcacctt
                                                                      900
cacagagatt ctgcactaat ctgagtgaag gtctaaggtt tggaatctcc ccctcatgga
                                                                      960
gagaagettt gtatggetgt catgettaga cagtgattee tgcaaettga cetteagget
                                                                     1020
gggagaggtg gagagecatg cetgttetee tteettgeta tggaatttge tgacacaata
                                                                     1080
tetteegeet ggtgetggge atateetaag aacttacaac ttteetgtat tateetgtgt
                                                                     1140
gagcagetgt cacettattg ggggaaaaat geetgaaaat tagggggeae tteaagtaga
                                                                     1200
tagettetat tteetatatt tgtettatat acaagtattt gettttatea aaataattee
                                                                     1260
aataaagcat tttaaagtaa agaataatat aggaaataga agctatcata cttgaagtgc
                                                                     1320
cccctaattt tcaatgaaat tttcccccaa taaaggtgac agctgctcca cacaaggata
                                                                     1380
atacaggaaa gtttgtaagt tottaggata tgcccagcac cagggcggaa gatattgtgt
                                                                     1440
cagcaaattc catagcaagg aaggagaaca ggcatggctc tccacctctc ccagcctgaa
                                                                     1500
ggtcaagttg caggaatcac tgtctaagca tgacagccat acaaagcttc tctccatgag
                                                                     1560
ggggagattc caaaccttag accttcactc agattagtgc agaatctctg tgaaggtgca
                                                                     1620
ttgtccctgg ctgggcttcc agagttcatt ctttactcaa ggataacacg gcgatgaacg
                                                                     1680
tettacaact cagttgtttt gagtcageag gggetgtggg geegetagee gagtteeece
                                                                     1740
tgccacgage taggtcagtt ccaagcaaag acaccagaaa ctccagtgtg caacggtagt
                                                                     1800
tcacccaact gcactgggga ccgccctctc ctaccccagc caggccgcga cgtggccgcc
                                                                     1860
cgccggctgc tgcgcaaagg cagcgcaagc cgttgggatc ccctgctccc cctcactcaa
                                                                     1920
cagtegggee attacaacte teatactgee aaccaegag eccaettege aaccaeactt
                                                                     1980
atccccacct tggctatcat cacccgatga ggcaaccagc cagaacgcct gaacgcaggc
                                                                     2040
acatacttcc tattctacac cctagtaggc tecetteecc tactcatege actaatttac
                                                                     2100
actcacaaca ccctaggctc actaaacatt ctactactca ctctcactgc ccaagaacta
                                                                     2160
tcaaactect cageeteeca agtagetggg actacaggea tgeaceacea caeetggeta
                                                                     2220
tttttgtatt tttactagat tttcaccatg tttactaggt ttcaccatgt tagccaggtt
                                                                     2280
ggtctcaaac tcctgg
                                                                     2296
```

```
<210> 5735
<211> 1671
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1179)...(1490)
<223> similar to~gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5735
caaggattaa aagaatatga tcaagcattg gtaaattttg ttccaaatgt ttaattttt
                                                                       60
aaaatagaca actaccttta taaatcatac acctaactta aatgtttttt tccaattaaa
                                                                      120
ggctgatctt aagaaagctc aggggatagc accagaagat aaaggtaagt tggcagcttt
                                                                      180
tgtagtgaaa gttaattttg ttatttaaat acttatcctc aggaaccatt gttcactttg
                                                                      240
ccagatttta gatgtttgtt caacagacac tacagaatgc ctgctgttgg gccaggcatt
                                                                      300
atcatatage aatgaacaag acagtcaaag tecetgeeet caaagagett acattetact
                                                                      360
cccattcaag aatatagtag tttttcacgt tatttattct tcaagttatc atctctgtag
                                                                      420
ttttttatat, gtctaaatac tgtttgtctt atggtatcct ttgagactgt gttcctattc
                                                                      480
tggttagtct aggtcgagag gctcagcatt gtaagacaca gtattccatg gtaaatttaa
                                                                      540
ccatttggga cccattcaag ttgaatgtgg ctataacctt agtattgatg tactggttat
                                                                      600
atgittitagg aaactatgac aaaaataagc tigittitica aataaaccaa ctatgaatag
                                                                      660
tgacactaga tetgggtatt acaaaatgte tttggtetet tattactaaa atgaaacaag
                                                                      720
ggaagcaatt actgttctct aatgtagagg cagaaggcaa atcttgatgt acttgagttc
                                                                      780
teteagttga cateetetaa aattaegttt catttetgtg tttgtgtgat tgeteagatt
                                                                      840
ttctgttact agggettagt tactttgtag agaagttttt tcaaggggta qttaacatta
                                                                      900
aaatagtttg ttagtcacca taattttttg gatattttga gaaataactc acattgcata
                                                                      960
tttattttac agctatccag gcagaattgc tgaaagtcaa acaaaagata aaggcacaga
                                                                     1020
aagataaaga gaaggcagta tatgcaaaaa tgtttgctta gaaaggattc agttttgctt
                                                                     1080
attgtgtgtt gattgtataa atgcaataag aaaatgtaaa ggtttttgtc tatgaatatg
                                                                     1140
atccctaatg tgtttctttt gacaccttag ttccttactg tttacagttt aggagtactg
                                                                     1200
ataggggttc atgettaata aacatgteac aatacagtaa gtaaagtggt tttgtttgtt
                                                                     1260
tetttgagat ggagtettge tetgteacce aggetggagt geggtggege aatetegget
                                                                     1320
cactgcatcc tetgecteec gggttcaage aatteteetg ceteagette ecaagtaget
                                                                     1380
gggattacag gcacgtgcca ccacgcccag ctaatttttg tatttttagt agagatgggg
                                                                     1440
tttcaccata ttggtcacgt cacgttggtc ttgaactcct gaccttgtga tccacccgc
cttggcctcc caaagtgctg ggattacagg tgtgagccac cgtgcccggc caagtaaaat
                                                                     1560
gttttttaaa atggttatgt gcattattca taaaaaataa tggtgtccag tctttttaaa
                                                                     1620
cttgtaaaga cacatcttat tgaataaaga gatgagagct taaaaaaaaa a
                                                                     1671
```

```
<210> 5736
<211> 3035
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<400> 5736 caccttcaaa tgcactcaag acccataaaa taataaaaca tactagctgc tccattttca 60 tttcaccact ttgaaatctt ggaaccactg atgtgatatc ccacagagag ggcaagactt 120 cactgtgaag tcaccaaagg aactcctgcc cttctaggtg ccacttgagt aataactccc 180 aactcactgg tcctctaaac ctgcagcagg gagatggtgt gctaggtagc tacatgggca 240 ggagaagaaa tggaaacaaa ttcccggagg atgtttttgg ccatctcgat gttgttctgg 300 gcaatgacca aagetttetg gatgteetgg taggagtacc cetgaeteat gaggtteteg 360 atctcactgg agagetgagg tgagggeggt ggcagcagag geggcaggac cactacettg 420 ctgacagetg ccagetttcc gttcagagtt gattetccgc gggaatggtt ttggaggeet 480 ctegggaact tgggaacett cagtgacatt ttgtggttag ggatcccttt ccaggacaaa 540 cagaccaagg aagagetege atttgagata tetgagagag tteggeggge cateceggee 600 ggcacaggtg gctttgggac atcataccca tcatcctcat tttctgactc ctcgggacca 660 gtgttggctt gggctgcggc caaattccct tcaccaaagg tgctgctctc ggtgatagat 720 ggcgcctggg actgaatatt atacattgct tcatacgtac agctatcaat ctgctggtcg 780 caatcacatg ctcgtgaact ctgggatgta tccaaaggcc gtagaggcct ggaagaggga 840 gtcatgtact ctgtgtcctc ttcaccctca cattgctccc caggtggcag ttttggcaca 900 ggaagaggtc tggcagccag agaataaatg gcattggcag atgaggaagg tttgattttg 960 gggtggtcac actctggacc tactaatggg ctgctattca tactcatgga ggtatccaga 1020 etgaacgtgc tteegageet aggeacatet ggtetggget ceatttgtga gggeaatgaa 1080 aatggaagtg agtgccggtt ggttaattet etteetgtee agggateaet ggaacttggg 1140 gcagatactg gtactttggg gattggccgg ggcagccatg agtctccaag gcggctagag 1200 gggacagggg gcagtttgtc tctggaggga cagtcgcctg gtgtacaagg caaggggcgt 1260 ctttgaggtc gggattctgc tccaacagaa tatggccggt ctggaggcgg tggtggtgga 1320 agatetegaa gtgtgggagg taetggeaat ggtttgtett tatgaaqqqa qecaqaaqca 1380 gccttagaag cagttccaag agcagaagca cttgagggaa cacatactcg ctgcggcaga 1440 aggtcaagtc gtggtggcac cgggggaagg gaagcttgtg gggccatgga gaatggagaa 1500 ggcggccgtt ccaccttggc accagccaat tccttcatca tgaagagagt atcatcagct 1560 egtteateat cateateate ataatttggg gagggagete eetetgetee ttgeeteaae 1620 aggetgecae teeetetagg ateaaaegga tetaceaega tgggtteagt acetttaatt 1680 teacategge agaaaggaca geeetgaeet tetgatteet geeaggatgt aagacaggat 1740 gtgcacatga ggtgtccaca gggctcaatc tttacatcct tatcattttc agcacatatt 1800 ttacatagtt ggaatgtgga gcccatctca cagtataatt catattgttc ctgggtcact 1860 ttgatatggt cttggggagt tggttcacat aagccagtca gatcaggatt ctgatttcgt 1920 ccatcaggaa acaaatagaa gccttccctg aagccatcaa tcagtgcttg gaagagaggt 1980 ttattgtgag ggattgtctg gagaatgttc ccatcagcag taacataccc aatagcccac 2040 tgacccagac gagtacaget cageeggaag atataactge caggtttgtg aatgaattte 2100 tggagccgag ctttcacttc gtcatacgtc aaaaaagcca tgtagccagg atgagttaca 2160 gcaaggctgt tccaattcct gagcaaagag gaccagggct gaaagagtcg ggtaaagatg 2220 tcaaattcaa aaaccgaaat ataatcattg caggtcagat caatagtgga tttcaqaqcc 2280 atggcctcca gcccagaact gatgggatgc acttcatgta gagcctgtcq aaaqctcttc 2340 caagggacta ttgtcttttc cccaaaagct tttctccaaa attccgcagc atctgcttta 2400 gtaatccgaa atgtgtctcc ctgaaagagt ccacttggaa agattccttt tagttctgcc 2460 agcatgtggc tgaagatgag ggacagtttg gttaggtttc gcctaggctg agaattctcc 2520 tcatacattc tttctttcc ctccttgaag aggcttatgg tttgcttagt tttcttcatc 2580 aaatteteea taaacaceet aaaataetea tttteteeaa gtgteteeat etteeeetea 2640 tatettgaca agatagtacg gagatgetgg taggtatetg gtagcaggte taagatataa 2700 ggtgggctat tctttagcgc cagctttggg ttctgacaca accgcaccac cttgtccatg 2760 agettecage aettetecae catettettg tecacegtee eeggegggtg ggggetgagg 2820 tggtggtggt ggtggtggtg cggctggaag gcgtccttca tgagcccaat caggccaccc 2880 gaaccegage ccceggagee getgeegeee ceggeeceag agetettett caegttgeeg 2940

```
<210> 5737
<211> 1832
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1782)...(0)
<223> similar to gil006659 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5737 ttttttttt ttgaaggaaa ggaactttca atgagaaatc aaaacacagg ggaaccaaag 60 tgcaaatcat ccaccccca tgggggggcc aatcctgaac cccacatcat cccctcagcc 120 cccttcaggc ccccagcgca ggcccagggc tcggatgctt ctgcctcagg tagctcttga 180 gctgggggca ggcctctctg ggactccagt tcctcgaagg gtagacggca gggagcttga 240 ageceattea ggeetagggt geegtteeet eaggggeeet tegageeeag teaggeaeee 300 gggccgtccc ggcagtaaat gcccagccgt tcccgcaaca ccagcaccac cctctgggca 360 agggtetega gtagtggege tagaggeage etgggeeetg tgggeaggae eettggtggg 420 tatggcagga aggggtcctg ggtcctcacg ggaagcacag caccagagct gctggcgcac 480 agcaggaagt ctgtgcagta gcctggaggc acagtcaggt cctggcggta tttctcctcc 540 cccagcaget ggegeaacce etcagetact atgteettgt gaetgtactt geagegggea 600 cggtcggtga tgagaggctg gggaaagatg ggcacttgct gccttcgggg aaggcgggga 660 ecceggtate etgggagete cagetecaeg geegtgteca geagggagag gtagegaege 720 acaatcagag catgaggggt gccactgatg tagttgatga agccagggga aaaaacaaag 780 tgcagggctc tgaagggcag gcaccgcagt tggcacagtg acatcaagat gttgactgta 840 gccaggggtg ccaccctgc ttcccgagcc aggatectct caaggcaggg cataaactgc 900 tgttccaggg gcaggtagtt cagtcgccca aagggcagga ccaacttctg taccaccttg 960 ctgctgagtt gcgtttcctg aaccaccagg aagtgggcaa tggcttccag aagctggggc 1020 tecegeaace ggtgeeggge caggtgetgg geeaggagea ceateaegtg gggagteagt 1080 teetetggee ttgeetetge caggetgetg atcagatget geegtggata eegcagaaaa 1140 cgggggcage ttagagcage ttecaaceet tgeecacete ggagaagggg etgeaaaggg 1200 ggaggtgget teggagggag geggageett egeteetgtt eeagggeaca caecaqqqqa 1260 ccatcagatg gaaagccaag taagactgca aggtgcagac acacgtggat ggtgtgaatg 1320 tcaaaggagg ggcagtttcg gatgatgagc tgactcaagt cctgcagtgt gacctgctcc 1380 acaggagggg gccgtggccg agaccccaag agctggccca gacgacgaag cgccaccgag 1440 tagtggtggg cgcgcacctt gctggggttc tggcccagcc agcgcagcag ctccccaggg 1500 etettegeet gtteeagaag eegetgeagt eettgeacag gaeetgeact ggggeeteet 1560 ccaacaggcc ggtcccccca tttgctgggc cccaaacagc agggctgtac tggagggatc 1620 agcagcaggc cagacagccg agcagggag gtctgagcag agagcaggac tcgaagcatg 1680 gagttgggtg atggagacca tgactccccg ggccctgcgc aggtcgctcc ctcagtcggt 1740 ctcggggccc gggggccggg ttccccccgc ggcctcctca tcggctagcc accgagtccg 1800 ccatcttccc cctcgtgccg aattcgaatc ga 1832

```
<210> 5738
<211> 1651
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1539)...(498)
<223> similar to gi5281034 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5738
ttttttttt ttcagtgaaa ttgaattttt attccaaatg actaatatct agaaaggcag
                                                                       60 %
tagctaacac tcaaaacaat ttgtttaagt gtaaattaaa agcagttgat ttgcaggaga
                                                                      120 -
gcaaacagtg gggtagtggc catggcactc tgatcatggt tatatccaag aaagcataaa
                                                                      180
ataaccaatg tcctgatatg caatctggat gtgcagcatt tacagcaaac aacataaaaa
                                                                      240
gaaagaaaga agaatggaaa agaaaagaag aaaaaaacca ccacaaagtc ccaaacctca
                                                                      300
gaaattaaca ttcacttaag aacacagtgg tgaagacttt tggtagcaaa atctgcacgg
                                                                      360
ttcttaaaat gggagtcttc aaaagtactt cttcaaattc aaaagctaag aaaaccaaag
                                                                      420
agggaacagt tacacaggct tagtggagat gccgcctgtc atgaagatga ccatcagtcc
                                                                      480
tacttcccag acacagtgag aaccggtgag cctgacgaac ctgaaggaaa aggccggctg
                                                                      540
acgggtgctg atgccactga ctatacaaga acacacggg tcaactcatc attgacagcg
                                                                      600
agagacacac tactgeteet eetggetgat gecaaggetg cetttetgea ceteaagete
                                                                      660
ctcggcactg accattgatg ggtcaatggc cgcgtatttg gttccatgga attgcagcaa
                                                                      720
atgtatetgt acataaagat tgacetetge acttetgeae aggtatggga aattgeetee
                                                                      780
tgttttcaga tgagctcttc gggcattagg atacagcttg tacatttctt ctttagcttc
                                                                      840
agttgaaagc gcactctgat caaacacatc cataataqtt acaqqtatqt cccqaatttt
                                                                      900
atgaggttcc acataagaat titgacaatt caaggtaagt citgaagcca gitcactctg
                                                                      960
acceaaactt tetageetgt etaceatgaa atcaatggea teageeatea tagggteeae
                                                                     1020
cgggccagat gaaaaatttc caagaactat ttttttgagc ataaatgcag gcatcagcca
                                                                     1080
aaagctgttt gcagtccaag tttggttgaa gatagaggtg tcactgaagg aattgcagag
                                                                     1140
gattagggaa tggactotag gagatttgtg agtgtattca gcaaatttct gggccaaaaa
                                                                     1200
gcctcccaaa gaagcgccaa aaagatgaac tttatccaat tgtaaatggt ctaaaagttt
                                                                     1260
tetgaateea teacagaaet egagatggte eeaataaaet ggataetgea aagegataae
                                                                     1320
coggtaaccc catccagtca gagccaaaat ctgccggaaa aagacatctg cagttccact
                                                                     1380
gacagggggc aggaatatga gaggacacct gatacttcgg gggcccgcgt catagagcga
                                                                     1440
ccatatetta etgteateat catecacaat aatettttta aggggaactg tacetetaaa
                                                                     1500
ccagttataa tcaggagaga ctttaatctc tcccatgatt agctgaaatg gaggttaatc
                                                                     1560
ctgccgtggc cgccccacg tcccttcccc tccttcagga ggccgctctt cgctccagta
                                                                     1620
cgagegeggg cegtggagge ggetgggeee g
                                                                     1651
```

```
<210> 5739
<211> 3019
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(3020)
```

<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2664)...(345)
<223> similar to gi2347131 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<400> 5739 tttttttttt ttgtggaaac cattgatttt tattaatttc ataactgcgg aaattccatg 60 tgaaagtgaa acaagcgatg agtcaagtca accagggaag gaatctgggg acaggccaaa 120 ggagcgggag gtggggcagc gaggcagtcc tgctggtagg agccctgaac atttcccaga 180 cttgtgtgcc gctcgctctg gcatcctaga gacccggatt tactcagcta ggagagaga 240 ttggatcaca aggttetaag ggtggeecat teagaaggta gaaaatggág gggeeggeag 300 attetggeag ggeaageaaa agggeteaag tggeeattgg etaggagggg taaaaaaatt 360 caggacatcc ccccagggtg ctgcctcagc caagggcttc attgcgggaa gatgattgat 420 gtgaaagttc tcgtgggcgg cgggaccttt gctacggagg ggcccttttt tgggggagttt 480 ttgtccagca gagccaaggc agggggttgt aaaagacccc agctgcacca gaccccacct 540 gcagataacc tgaatctccg ctcaaggaaa acctgctccc ccagaattct cacttgcagg 600 ggacteteat ceteetgggg teacactgea taaggaactg ggtetgteae cacetteeet 660 gacateetgt caagttgggg aaccatggtt tttttettgg gagacaacce teggcaacag 720 cttgtccact ccactcccat tcttaaggtt aaatgttcca gtttgctccc attccaaggc 780 gaccaaaatg tgcagagaad actotgtttg ttccagccag ttcattctca tggtccccta 840 caggtgctgc ctttgaaggt ctcccgcaag aagccaagat tggcctccca tcgtgcaagg 900 gaaggcaaga tgggccctgg caatgggtgg aacatcttta ctttctgggc cagcttcaag 960 cagagetatg teaateacca tagaacteec aggatteect ggttettttt ggcaaagaca 1020 tcaaaccctg gggagatcac cgccttctca ataaggaatt ctttgcccca ctgggatttg 1080 gggtetecca cattgaccet ccacagggag tggtegttge categeggaa gcaatgaget 1140 gctgtcagga cccattggtc ggagatgagg gcccccggg cagggtctct tggctcttgg . 1200 gcttaatagt gacatgccag ggtgtcctct cctggtcaga ggcgtttgct gacatgttcc 1260 ccaccccgca gatggtgtct gtgagcttgg agacatccag catatgttca aagacctggt 1320 gcagageett tgtgteetge agaatgaagg catgeetete accateette ttggaeeeta 1380 geteatteag tteteteeag tecacateea gettgeeeae eeegatggea tagatgteea 1440 gatagteatt cetettetgg ttgatgttea ggatetetet gatatggtea acagetgtet 1500 tgggagagcc acccatatgg gactttccca tctgtcaaga aggatgatgg catgtcggat 1560 tteetgeeea gneeategtt teeatgeega ggagtegeat ttggttgtte ateatgagat 1620 agacactgtt taaggccgca taggtgttag tcccagttcc attttcatga tctttatagt 1680 tggcattttc caggetgetg atcaceteag teatateeeg ggagttgteg tteaggaeag 1740 acatgaggac tttgggctct gaggcaaagg tgataatggc aacgctcaca ttgatctcaa 1800 agetgaagat eetgteeace atgagggagg egeteteett gaagatgaga aagteatttt 1860 ccgacacact ctgcgaacag tccaggagca ggtagaggtt cagatgacca gaqcqctqqa 1920 tttggatttt acggcccagg ctttcctttg tcttctgggt gggattggtg gccccaagca 1980 tgtgggagaa ggaagtgccc agggcagggg ccacgtcctc agggaagtca taagagtagg 2040 gttggcggca gatgggctcc gttccactcc agaccccgtt gccctggcac tcccgctccg 2100 aagaccccgt gagcacaaga ttcgaggagc agcgatagcg gaccttgtcc ccatgaccaa 2160 agcggaagcc tgtccgcact tggcccaagt gaaatgcctg ggttggggca gtggccagcc 2220 ccattateae acacagetgt ttetecatee cacatgeegt tggggegaea etgaegeaea 2280 ggcgagcccc gcaattatga agccatcctc acactcgaag ctcacattgc cacccacggg 2340 ataggacccc ageogtgggg tataaatgcc attetcaaag gagacagggg etggacageg 2400 cacaggittg cagaccgcct tagacagaga cegggtgget eetggggtet gecactgice 2460 getgetettg cacageegtg atgetgggga tgggtacagg ceetggggge aggagtaggt 2520 gagaaggete ceaggageee agecatgget gagggtgaag gtgccacceg agatattcac 2580 gttctgaggg caggagggag ccgagtctgc cagacctggg tacaggaaca gcaggcaaaa 2640 aagaaccatc agtgggccca tggtgtcctc cctaggggcg gcgagaggta gagagccgcg 2700

```
ggagggaaaa ggtcatctga cttcccgaaa actagagctg ggtcagcagc tgcttcattg 2760 ctgccagaga agaaaaacca gggagtggca agggggatgg tcttctgtta gggaaataat 2820 aagcagggat tggggactga actgaagggt gaaacctttg ccctgtctcc ctgatgctaa 2880 tatatctata gggtcaatag atctccccca caggctttgt gtactgcctc cacgctccac 2940 ccacccatgc gtgcacatgt gcaccataca cgcatgctct caaacacgca ggcaagcaca 3000 tattggggag ttccccagc 3019
```

```
<210> 5740
<211> 1617
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (377)...(972)
<223> similar to gi5726238 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5740 ttagcagcaa gtgctgtttc ctggggcagg ggcaagtacc cctcaacccc ttctccttca 60 ceettagegg caagteeege ttteetaggg ggcaagaace ecceaatege ttattteege 120 cgcaccccaa cctcttatct ctgtgcccca atcacttatt tctgcaccct gacctcttat 180 ctctgtgccc caatccctta tttccctgcc ccaacccctt ctctgctttc ctggagggca 240 agaaccetce geceettete cetgteteta etettttete tgggettget cetteactat 300 gggtaagett ccacceteca tteeteette tteteeetta geetgtgtte tcaaaaaett 360 aaaacctctt caactcacac ctgacctaaa acctaagtgt cttattttct tctgcaacac 420 egettggece caatacaaac tegacaatga ttecaaatag ceagaaaaeg geactttega 480 gttctccatc ctacaagttc tagataattc ttgtcataaa atgggcaaat ggtctgaggt 540 gcctgacgtc caggcattct tttacacatt ggtccctccc tagtctctgc tcccaatgtg 600 actoatocca aatotttott otttototoo tttotgttoo ttoggtotoo accocaagtt 660 cegagteete tgaateette ttttetatgg acteatetga cetececeet tetececagg 720 etgeteeteg ceaggetgag ceaggteeca atteteaett ageetetget eececaeeet 780 ataatcettt tatcacetee ceteeteaca eetggteeag ettacagttt catteegtga 840 ctagecetee eceteetgee cageaattta etettaaaaa ggtggetgga getaaaggea 900 tagtcaaggt tagtgctcct ttttctttat cccaaatcag atagcgttta ggctcttttt 960 catcaaatat aaaaatccag cccagttcat ggctcatttg gcagcaaccc tgagatgctt 1020 tacageceta gacectaaaa ggteaaaagg eegtettatt eteaatatae attttattae 1080 ccaatctgct cccgacatta aataaaactc caaaaattaa attccggccc tcaaacccca 1140 caacaggatt taattaacct cgccttcaag gtgtacaata atagaaaaaa gtttcaattc 1200 cttgcctcca ctgtgagaca aaccccagcc acatcttcca gcacacaaga acttccaaac 1260 ggctggaccg gcagcagcca ggcggttcct ccagaacctc ctcccacagg agcttgctac 1320 acgtgccgga aatctgggca ctgggcaagg gaatgcccgc agcctgggat tcctcctaag 1380 ccacgtccca tctgtgtggg accccactga aaatctgact gttcaacttc acctgggcag 1440 1500 agatetttgg gettageaag etgaagaetg acaettgeee gateegeett eggaageeee 1560 ggagaccatc acggacgccg agctgccagt aactctcaca gtggaagcta tctggtc 1617

```
<210> 5741
<211> 867
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (97)...(357)
<223> similar to gi288145 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5741 gatttttcaa gtactgctat ttttaaaaaa tccaccagag gcagaggctc ctgcctgtaa 60 taccagcact ttgggagget gaggtgggag gategettga ggecaggagt ttgggaccag 120 cctgggcggc gtggcgagag accctgtctc tacaaaaaat aaaatttaaa aaattagctg 180 ggcgtggagg aggcatgcac ctgtggtctt ggatacttgg ggggctgagg caggaggatc 240 acttgggccc gggagatcga ggctgcagtg agccgttatt gtgccactgt actccagcct 300 ggacagcaga acaagaccct gtctcaaaaa āaacaaaaac aaaacaaaaa aaatcctggc 360 attiticatea catticatea tiggaatage ettacigtat ggatagigee cataattita 420 aaataatttt taaataatta ttgcttaatc agataattgc taaagtaaaa tttcccaaat 480 tttgctttca catcgacatt tatttgctat cactgagttt gtacccctaa tccattaaaa 540 agtagaaaac agtgaaatag ggcatttgtt ctaagtaatg ggagaagatg taactggaga 600 agatggaaaa aagttgtaag aaccactgct ctgtataggt tgtaaaagca gtattaaata 660 tggtgcctgc ccttgctaaa ggtaacatga agtaataggt agggtaaatg cactcagctg 720 tgtgggttgc ttgaaagatc ttgtgagcct gttcactctt gcagttgaaa gactggatca 780 cttctttctg gcgttgttta tttttatgca gactccaqcc tqqacaqcaq aqcaqqaccc 840 tgtctcaaaa aaaacaaaaa caaaaca 867

```
<210> 5742
<211> 1722
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (268)...(1208)
<223> similar to gi6002700 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5742
agettecage ccagteggee cggceegggg gecatggage teegagegge ggategegag 60
cctectgcga accecageet geacgeeggg ttageatteg geegggagat geggeagtgg 120
aatetggaag ggeggtgaaa aacetacgte etgecetege eeggeetete cattegteee 180
ccggggtagag aggtgeegg etcecaceee tteecageee eageeetgga gacageagee 240
cctagactae tgagggacag egacageatg aaggeteegg gteggetegt geteateate 300
ctgtgeteeg tggtettete tgeegtteta cateeteetg tgetgetggg eeggeetgee 360
```

```
420
cetetgeetg gecaacetge ceetggaaca accaacttee ceaacagget eccaggeece
actgtgcccg ggacccctgc aacttcaagt ggaataatag cagtgtgcca agatgggaaa
                                                                      480
geogetggte eegegaagee eetgeegeaa getgtgeeeg tggtgteeea geteeggeee
                                                                      540
                                                                      600
aaatgetggg etcaggeeet gggtgetgag ategacagtg eeegagtgeg tgtteegeat
gaaccaqqcq ccccaccgtg gqctttqaag gcggaatgtt gggcccagcg cagcaccctg
                                                                      660
egtgtegtet cacacacaag egtgeegetg etgetggege aactatteac actaetteca
                                                                      720
gaaggcccga gacacgctct acatggtgtg gggccagggc aggcacatgg accgggtgct
                                                                      780
eggeggeege acetacegea egetgetgea geteaceagg atgtaceceg geetgeaggt
                                                                      840
                                                                      900
gtacacette aeggagegea tgatggeeta etgegaeeag atetteeagg aegagaeggg
                                                                      960
caagaaccgg aggcagtcgg gctccttcct cagcaccggc tggttcacca tgatcctcgc
gctggagctg tgtgaggaga tcgtggtcta tgggatggtc agcgacagct actgcaggga
                                                                     1020
gaagagccac ccctcagtgc cttaccacta ctttgagaag ggccggctag atgagtgtca
                                                                     1080
gatgtacetg geacacgage aggegeeeeg aagegeeeae egetteatea etgagaagge ,
                                                                     1140
ggtettetee egetgggeea agaagaggee categtgtte geecateegt eetggaggae
                                                                     1200
tgagtagett cegtegteet gecageegee atgeegttge gaggeeteeg ggatgteeca
                                                                     1260
teccaageea teacaeteea etecetgagt aatteatgge atttggggge teaceceace
                                                                     1320
tecaggicity teaagiggee titgiceety gggetgatgg ecceeaacte accageatea
                                                                     1380
tgacettgtg ccagtectgg tecteectee ccageegete etaceaeett ttggtgeeae
                                                                     1440
actteteagg etggeegeee tggttgggge ageegagage etggggttea ttggtgaagg
                                                                     1500
ggccttggag ttgtgactgc cggggccgta tcaggaacgt acgggtaaac gtgtgttttc
                                                                     1560
tggatgetgt etetagegtg gteatgtgte tgatgtgttt aggggtggag atgagggttt
                                                                     1620
ctttccctgt cacagaccca gaagcatttt ttttttggga agggggtttt ttcttttcc
                                                                     1680
ccaccegggt attgctgggg geceettttg gettatttag ge
                                                                     1722
```

```
<210> 5743
<211> 9502
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(9503)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1430)...(3051)
<223> similar to gi4773880 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5743
atgcagtggt cagtgataat ggaatacttg aaagtaatcc cctcactcca ggaactagtg
                                                                       60
ctcagctagc agaactaata gccctcactt gggcactaga attaggagaa gaaaaaaggg
                                                                      120
caaatatata tacagactot aaatatgott acctagtoot ccatgoccat gcagcaatat
                                                                      180
ggaaagaaag ggaatteeta aettetgaga gaacacetat caaacateag gaagecatta
                                                                      240
ggaaattatt attggetgta cagaaaceta aagaggtgge agtettacae tgeeggggte
                                                                      300
atcanaaagg aaaggaaagg gaaaatactt ttgcctgcaa ctatccaatg gaaattactt
                                                                      360
aaaacccttc atcaaacctt tcacttaggc atcgatagca cccatcaaat ggccaaatca
                                                                      420
ttatttactg gaccaggect tttcaaaact atcaagcaaa tattcaggge ctgtgaattg
                                                                      480
tgccaaaaaa ataatcccct gcctcatcgc caagctcctt caggaaaaca aaaaacaqqc
                                                                      540
```

```
cattaccctg aaaaaaactg gcaactgatt ttacccacaa gcccaaacct cagggatttc
                                                                     600
aqtatetaet agtetqqqta aataetttea eqqqttgggc aaaggeette eeetqtaqqa
                                                                     660
cagaaaaggc ccaagaggta ataaaggcac tagttcatga aataattccc agattcggac
                                                                     720
ttccccgagg cttacagagt gacaatagcc ctgctttcca ggccacagta acccagggag
                                                                     780
tateceagge gttaggtata egatateaet tacaetgege etgaaggeea eagteeteag
                                                                     840
                                                                     900
ggaaggtcga gaaaatgaat gaaatactca aaggacatct aaaaaagcaa acccaggaaa
cccacctcac atggcctgct ctgttgccta tagccttaaa aagaatctgc aactttcccc
                                                                     960
aaaaagcagg acttagccca tacgaaatgc tgtatggaag gcccttcata accaatgacc
                                                                    1020
ttgtgcttga cccaagacag ccaacttagt tgcagacatc acctccttag ccaaatatca
                                                                    1080
acaagttett aaaacattac aaggaaceta teeetgagaa gagggaaaag aactatteca
                                                                    1140
cccttgtgac atggtattag tcaagtccct tctctctaat tccccatccc taggatacat
                                                                    1200
1260
tggctggagt ggtcttggat acatcacact tgagtcaaat cctggatact gccaaaggaa
                                                                    1320
cctgaaaatc caggagacaa cgctagctat tcctgtgaac ctctagagga tttgcgcctg
                                                                    1380
ctcttcaaac aacaaccagg aggaaagtaa ctaaaatcat aaatccccca tggccctccc
                                                                    1440
ttatcatatt tttctcttta ctgttctttt accctctttc actctcactg cacccctcc
                                                                    1500
atgeegetgt atgaeeagta geteeeetta eeaagagttt etatggagaa tgeagegtee
                                                                    1560
eggaaatatt gatgeeccat egtataggag tetttetaag ggaaceecca cetteaetge
                                                                    1620
ccacacceat atgeccegca actgetatea etetgecaet etttgeatge atgeaaatae
                                                                    1680
tcattattgg acaggaaaaa tgattaatcc tagttgtcct ggaggacttg gagtcactgt
                                                                    1740
ctgtcggact tacttcaccc aaactggtat gtctgatggg ggtggagttc aagatcaggc
                                                                    1800
aagagaaaaa catgtaaaag aagcaatete ecaaetgaee eggggaeata geaeeeetag
                                                                    1860
cccctacaaa ggactagttc tctcaaaact acatgaaacc ctccgtaccc atactcgcct
                                                                    1920
ggtaagccta tttaatacca ccctcactgg gctccatgag gtctcggccc aaaaccctac
                                                                    1980
taactgttgg atatgcctcc ccctgaactt caggccatat gtttcaatcc ctgtacctga
                                                                    2040
acaatggaac aacttcagca cagaaataaa caccacttcc gttttagtag gacctcttgt
                                                                    21.00
ttecaatetg gaaataacee ataceteaaa eeteacetgt gtaaaattta geaatactae
                                                                    2160
atacacaacc aactcccaat gcatcaggtg ggtaactcct cccacacaaa tagtctgcct
                                                                    2220
acceteagga ataittittg tetgiggiae eteageetat egitgittiga aiggetette
                                                                    2280
agaatctatg tgcttcctct cattcttagt gccccctatg accatctaca ctgaacaaga
                                                                    2340
tttatacagt tatgtcaata tcctaaagcc cccgcaacaa aagagtaccc attcttcctt
                                                                    2400
ttgttattgg agcaggagta ctaggcggac taggtactgg cattggcggt attacaacct
                                                                    2460
ctactcagtt ctaccacaaa ctatctcaag aactaaatgg tgacatggaa caggtcgccc
                                                                    2520
gactecectg gteacettge aagateaact taacteceta geageagtag teetteaaaa
                                                                    2580
tcgaagagct ttagacttgc taaccgctga aagaggggga acctgtttac ttttagggga
                                                                    2640
agaatgetgt tactatgtta atcaateegg aategteaet gagaaagtta aagaaatteg
                                                                    2700
agategaata caaegtagag cagaggaget tegaaacaet ggaceetggg geeteeteag
                                                                    2760
ccaatggatg ccctggattc tccccttctt aggacctcta gcagctataa tattgctact
                                                                    2820
cctctttgga ccctgtatct ttaacctcct tgttaacttt gtctcttcca gaatcgaagc
                                                                    2880
tgtaaaacta caaatggagc ccaagatgca gtccaagact aagatctacc gcagacccct
                                                                    2940
ggaccggcct gctagcccac gatctgatgt taatgacatc aaaggcaccc ctcctgagga
                                                                    3000
aatctcagct gcacaacctc tactacgccc caattcagca ggaagcagtt agagcggtcg
                                                                    3060
teggecaace teeccaacag caettaggtt tteetgttga gatggggggac tgagagacag
                                                                    3120
gactagctgg atttcctagg ctgactaaga atccctaagc ctagctggga aggtaaccac
                                                                    3180
atccaccttt aaacacgggg cttgcaactt agctcacacc cgaccaatca ggtagtaaag
                                                                    3240
agageteact aaaatgetaa ttaggeaaaa acaggaggta aagaaatage caateateta
                                                                    3300
ttgcctgaga gcacagcggg agggacaatg atcaggatat aaacccaggc attccagcca
                                                                    3360
gcaacggcta ccctctttgg gtcccctccc tttgtatggg agctctgttt ccactctatt
                                                                    3420
aaatettgea actgeactet ettetggtee gtgtttgtta eggattgage tgagettttg
                                                                    3480
cttattgtcc accattgttc tttgccgctg ttgcagacct gccactgact tccatccctc
                                                                    3540
tggatcctgc agggtgtccg ctgtgctcct gatccagcga ggcgcccatt gccgctcccg
                                                                    3600
atogggotaa aggottgooa ttgttootgo acggotaagt gootgggttt gttotaattg
                                                                    3660
agetgaacac taatcactgg gttccatggt tetettetgt gaeccacgge ttetaataga
                                                                    3720
                                                                    3780
actataacac ttaccacatg gcccaagatt ccattccttg gaatccgtga ggccaagaac
tecaggicag agaataegag getigeeace atetiggaag eggeeigeta eegietigga
                                                                    3840
agtggttcac caccatcttg ggagctctgt gagcaaggac cccccggtaa cattttggca
                                                                    3900
accaacgacg gacatccaaa gtgatgggaa acgttccccg caagacaaaa acgcccctaa
                                                                    3960
```

```
gacgtattct ggagaattgg gaccaatttg accetcagae actaaggaaa gaaacgaett
                                                                     4020
atattettet geagtgeege etggeactee tgagggaagt ataaattata acaceatett
                                                                     4080
acagetagae ttettttgta gaaaaggeaa atggagtgaa gtgecataag tacaaaettt
                                                                     4140
cttttcatta agagacaact cacaattatt gtaaaaagtg tgatttatgc ccctacaggg
                                                                     4200
aagcettcaq agtetacete ecetatecee ageateceeg acteetteee caactaataa
                                                                     4260
ggaccccct tcaacccaaa tggtccaaaa ggagatagac aaaagggtaa acagtgaacc
                                                                     4320
aaagagtgcc aatattcccc aattatgacc cctcccaagc agtgggagga agagaattcg
                                                                     4380
geccagecag agtgeatgtg cetttttete teccagaett aaageaaata aaaacagaet
                                                                     4440
taggtaaatt ctcagataac cctgatggct atattggtgt tttacaaggg ttaggacaat
                                                                     4500
tctttgatct gacatggaga gatatatatg tcactgctaa atcagacact aaccccaaat
                                                                     4560
gagagaagtg ccaccataac tgcagcctga gagtttggcg atctctggta tctcagtcag
                                                                     4620
gtcaatggat aggatgacaa cagaaggaaa gagatgattc cccacaggcc agcaggcagt
                                                                     4680
tcccagtcta gaccctcatt ggggacacag aaatcagtaa catgggagat tggtgctgca
                                                                     4740
gacatttgct aacttgtgtg ctacaaggac taaggaaaac tacgaagaaa atctacgaat
                                                                     4800
tactcaatga tgtccaccat aacacagggg aagggaagaa aatcctactg cctttctgga
                                                                     4860
gagactaagg gaggcattga ggaagcgtgc ctctctgtca cctgactctt ctgaaggcca
                                                                     4920
actaatetta aagegtaagt ttateaetea gteagetgea gaeattagaa aaaaetteaa
                                                                     4980
aagtetgeeg taggeeegga geaaaaetta gaaaeeetat tgaaettgge aaceteggtt
                                                                     5040
ttttataata gagatcagga ggagcaggcg gaacaggaca aacgggatta aaaaaaaggc
                                                                     5100
caccgettta gtcatgacce tcaggcaagt ggactttgga ggctctggaa aagggaaaag
                                                                     5160
ctgggcaaat tgaatgccta atagggcttg cttccagtgc ggtctacaag gacactttaa
                                                                     5220
aaaagattgt ccaagtagaa gtaagccgcc ccttcgtcca tgccccttat ttcaagggaa
                                                                     5280
teactggaag geceactgee ecaggggaca aaggtetttt gagteagaag ecactaacea
                                                                     5340
gatgatecag cagcaggact gagggtgeet ggggcaageg ceateceatg ceateaceet
                                                                     5400
cacagagece tgggtatget tgaccattga gggccaggaa ggttgtetee tggacactgg
                                                                     5460
tgeggtette ttagtettae tettetgtee eggacaactg teeteeagat etgteactat
                                                                     5520
tetgaggggg teetaagaeg ggeagteaet agataetttt teecageeae taagttatga
                                                                     5580
actggggage tttattettt teacatgett ttetaattat gettgaaage eecactaeet
                                                                     5640
tgttagggag agacattcta gcaaaagcag gggccattat acacctgaac ataggagaag
                                                                     5700
gaacacccgt ttgttgtccc ctgcttgagg aaggaattaa tcctgaagtc tgggcaacag
                                                                     5760
aaggacaata tggacgagcc aaagaatgcc cgtcctgttc aagttaaact aaaggattcc
                                                                     5820
accteettte cetaccaaag geagtaceee etcagaceea aggeecaaca aagggettee
                                                                     5880
aaaagattgt taaggactta aaagcccaag gcttagtaaa accatgcata actccctgca
                                                                     5940
gtaatteegt agtggattga ggaggeacag aaacceagtg gacagtggag ggttagtgea
                                                                     6000
agateteagg attateaatg gaggeegttg teettttata eecagetgta eetageeett
                                                                     6060
atactgtgct ttcccaaata ccagaggaag cagagtggtt tacactcctg gaccttaagg
                                                                     6120
atgeettett etgeateeet gtacateetg acteteaatt ettgtttgee tttgaagata
                                                                     6180
cttcaaaccc aacatctcaa ctcacctgga ctgttttacc ccaagggttc agggatagcc
                                                                     6240
eccatetatt tggccaggea ttageccaag aettgageca atecteatae etggaeaett
                                                                     6300
gteetteggt aggtggatga tttaettttg geegeeeatt cagaaacett gtgeeatcaa
                                                                     6360
gccacccaag cgctcttcaa tttcctcgct acctgtggct acatggtttc caaaccaaag
                                                                     6420
geteaactet geteacagea ggttaettag ggetaaaatt atecaaagge accagggeee
                                                                     6480
tcagtgagga acacatccag cctatactgg cttatcctca tcccaaaacc ctaaagcaac
                                                                     6540
taaggggatt cettggegta ataggtttet geegaaaatg gatteeeagg tttggegaaa
                                                                     6600
tagccaggtc attaaataca ctaattaagg aaactcagaa agccaatacc catttagtaa
                                                                     6660
gatggacaac tgaagtagaa gtggctttcc aggccctaac ccaagcccca gtgttaagtt
                                                                     6720
tgccaacagg gcaagacttt tcttcatatg tcacagaaaa aacaggaata gctctaggag
                                                                     6780
tecttacaca gateegaggg atgagettge aacetgtgge gtacetgact aaggaaattg
                                                                     6840
atgtagtggc aaagggttga cctcattgtt tacgggtagt ggtggcagta gcagtcttag
                                                                     6900
tatetgaage agttaaaata atacagggaa gagatettae tgtgtggaca teteatgatg
                                                                     6960
tgaatggcat actcactgct aaaggagact tgtggctgtc agacaactgt ttacttaaat
                                                                     7020
gtcaggctct attacttgaa gggccagtgc tgcgactgtg cacttgtgca actcttaacc
                                                                     7080
cagccacatt tcttccagac aatgaagaaa agataaaaca taactgtcaa caaqtaattt
                                                                     7140
ctcaaaccta tgccactcga ggggaccttt tagaggttcc tttgactgat cccgacctca
                                                                     7200
acttgtatac tgatggaagt tcctttgtag aaaaaggact tcgaaaagtg gggtatgcag
                                                                     7260
tggtcagtga taatggaata ettgaaagta atcceeteae tecaggaact agtgeteage
                                                                     7320
tagcagaact aatagccctc acttgggcac tagaattagg agaagaaaaa agggcaaata
                                                                     7380
```

```
taatacagac totaaatatg ottacotagt cotocatgoc catgoagcaa tatggaaaga
                                                                     7440
aagggaattc ctaacttctg agagaacacc tatcaaacat caggaagcca ttaggaaatt
                                                                     7500
attattggct gtacagaaac ctagagaggt ggcagtctta cactgccggg gtcatcacaa
                                                                     7560
aggaaaggaa agggaaatac aagagaactg ccaagcatat attgaagcca aaagagctgc
                                                                     7620
aaggcaggac cctccattag aaatgcttat taaacttccc ttagtatagg gtaatccctt
                                                                     7680
ccgggaaacc aagccccagt actcagcagg agaaacagaa tggggaacct cacgaggcag
                                                                     7740
ttttctcccc tcgggacggt tagccactga agaagggaaa atacttttgc ctgcaactat
                                                                     7800
ccaatggaaa ttacttaaaa cccttcatca aacctttcac ttaggcatcg atagcaccca
                                                                     7860
tragatggcc aaatcattat ttactggacc aggeetttte aaaactatea ageagatagt
                                                                     7920
cagggcctgt gaagtgtgcc agagaaataa tcccctgcct tatcgccaag ctccttcagg
                                                                     7980
agaacaaaga acaggccatt accctggaga agactggcaa ctgattttac ccacaagccc
                                                                     8040
aaacctcagg gatttcagta tctactagtc tgggtagata ctttcacggg ttgggcagag
                                                                     8100
gccttcccct'gtaggacaga aaaggcccaa gaggtaataa aggcactagt tcatgaaata
                                                                     8160
attoccagat toggacttoc ocgaggetta cagagtgaca atagccotgo tttocaggeo
                                                                     8220
acagtaaccc agggagtatc ccaggcgtta ggtatacgat atcacttaca ctgcgcctga
                                                                     8280
aggccacagt cctcagggaa ggtcgagaaa atgaatgaaa cactcaaagg acatctaaaa
                                                                     8340
aagcaaaccc aggaaaccca cctcacatgg cctgttctgt tgcctatagc cttaaaaaqa
                                                                     8400
atetgeaact tteeceaaaa ageaggaett ageeeataeg aaatgetgta tggaaggeee
                                                                     8460
ttcataacca atgaccttgt gcttgaccca agacagccaa cttagttgca gacatcacct
                                                                     8520
cettagecaa atateaacaa gttettaaaa cattacaagg aacetateee tgagaagagg
                                                                     8580
aaaagaatat tecacecaag tgacatggta ttagteaagt ceetteeete taatteeeca
                                                                     8640
tecetagata cateetggga aggacectae ecagteattt tatetaeece aactgeggtt
                                                                     8700
aaagtggctg gagtggagtc ttggatacat cacacttgag tcaaatcctg gatactgcca
                                                                     8760
aaggaacctg aaaatccagg agacaacgct agctattcct gtgaacctct agaggatttg
                                                                     8820
cgcctgctct tcaaacaaca accaggagga aaaatcgaag ctgtaaaact acaaatggag
                                                                     8880
cccaagatgc agtccaagac taagatctac cgcagacctc tggaccagcc tgctagccca
                                                                     8940
catgeteega tgttaatgae ategaaggea ceegtetega ggaaatetea aetgeacaae
                                                                     9000.
ccctactaca ccccaattca gcaggaagca gttagagcgg tcgtcagcca acctccccag
                                                                     9060
cagcacttgg gttttcctgt tgagagcggg gactgaaaga caggactagc tggatttcct
                                                                     9120
aggetgaeta agaateeeta ageetagetg ggaaggtgae tgeateeace tttaaacaca
                                                                     9180
gggcttgcaa cttagctcac acccgaccaa tcaggtagta aagagagctc actaaaatgc
                                                                     9240
taattaggca aaaacaggag gtaaagaaat agccaatcat ctattgtctg agagcacagc
                                                                     9300
gggagggaca atgaccggga tttaaaccca ggcattcgag ctggcaacgg ctaccctctc
                                                                     9360
tgggtcccct ccctttgtat gggagetetg ttttcactct attaaatctt gcaactgcac
                                                                     9420
actitititing tecatifiting that agentia agentiageth tegetimetry tecatement
                                                                     9480
ctgtttgctg ctgtcgcaaa cc
                                                                     9502
```

```
<210> 5744
<211> 1682
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (676)...(1265)
<223> similar to gi854065 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5744
teetteegee atgettggea egaggegeag aaggetgeag geeetatagg ggaegaeggg
```

```
ctggggacgc cctgagcttc ctggctgtgt ggcaggtgct ggggaagctc tctgggccat
                                                                   120
agggacetgg eteceetetg agaggeeege etgeeetggg acaeecaggg etgtgetggt
                                                                   180
ggcctgaggc tgggaacttg ggttcctggg ctctgctggc gcctgggctt tgtgggggcc
                                                                   240
gaaggtggtt gccccgccgg gcagggggct gtgtgggccc tcgtggggcc accttcctgt
                                                                   300
cagtgcccga gggacggtgg gacagttgcc cctgcgccaa gggagcccac tgccatcccc
                                                                   360
cgtgggctgg cgctgcagtc gcgcaccctg tgttgcctgc tgacttgctt atgtctgttt
                                                                   420
ggaagetget tetgtttgge caeaggeetg tgtteetggg ttgatggeea eagagetgae
                                                                   480
acttggggtt tgagttccag acttgcagac cctgggatcc gcttactcct ccgcgccacg
                                                                   540
                                                                   600
gctgctgtgc ttccagaggt ggcgtgatgc ctcccggggc cacggtgggg tgaaggatgg
cgagccggac ataccattgt tggatgtatt ttttttaaaa cagcaataat tagccatttt
                                                                   660
aaaggaggga tgtacctgtg tgtgtgcatg tgcacgtgtt tgagcgtgtg tgtgtgtgtg
                                                                   720
caagigggtt cttggatatg tgtagtgtga gcatgtgtgc atgtgtgagc ctgtgcacgt.
                                                                   780
gcatgttgta ggtgcataag catgtacacg cgtgagcatg catgtgcgtg tacacgtgta
                                                                   840
taggigtaca igigcatgag tigigtacai gcgigagcac gigiatagai giacgigigt
                                                                   900
gtgcgcatgt gtgcgtgtac atgtgtttgt gtcttgggta tgcataagca tgcacgtgtg
                                                                   960
tatgaatgtg cgtgtgtatg catgagcacg tatgcatgtg tgatgcgcat gttcttgtgt
                                                                  1020
acttetetga gggggeacat atgtatgagt gtatgagtge atacatatge atatggtgta
                                                                  1080
cgtgtgtgta ctttgtgtgt gggcatgtat gcgtatgagt acttgtgtgt ggctggtgta
                                                                  1140
tgggtgagca tgcacatgtg tatggatgca tatgtgagct gtacatgtag agtgtacatg
                                                                  1200
tgtgttgcat gagcatgcat gcgtgcgagt gcctgtgtgt gtacttgcat atatgtggct
                                                                  1260
gtgcaggtac ccggcggtgg tgggctggca gtgcccgggg aagcaggtcc tgctcacggc
                                                                  1320
ttecctgctg ggecccagge eccgggetga gectectgg eccetettge eccteagtgg
                                                                  1380
agcagggeet gggtggaggg cetgggeage tecagggeag gteeggggag geeaggettg
                                                                  1440
gggagcacag ggggtggggt tcacctgctg ctgtttgttc ccgaaactgt actgtgagcc
                                                                  1500
cacggcgggg ggcagattgt tttgaggccc cagatgtgcc aaaacagccc ccagggtggg
                                                                  1560
ggcgagcgag ttttgaggag aggggctgcg ggggccgggg gtgggtgtgt gcccctcccc
                                                                  1620
1680
                                                                  1682
```

```
<210> 5745
<211> 1145
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (177)...(771)
<223> similar to gi5706452 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5745
aactgttccc tactgatacc ctaggcagtg tggtggaatt cattgcttaa tccccaggag
                                                                       60
cccagtteet gtgggcageg cetgacatge etgateetet ettttetgea gttcaaggga
                                                                      120
aagacgagat cttgcacaag gcactetget tetgeeettg getggggaag ggtggeatgg
                                                                      180
agecteteeg getgeteate ttactetttg teacagaget gteeggagee cacaacacea
                                                                      240
cagtgttcca gggcgtggcg ggccagtccc tgcaggtgtc ttgcccctat gactccatga
                                                                      300
agcactgggg gaggcgcaag gcctggtgcc gccagctggg agagaagggc ccatgccagc
                                                                      360
gtgtggtcag cacgcacaac ttgtggctgc tgtccttcct gaggaggtgg aatgggagca
                                                                      420
cagccatcac agacgatacc ctgggtggca ctctcaccat tacgctgcgg aatctacaac
                                                                      480
cccatgatgc gggtctctac cagtgccaga gcctccatgg cagtgaggct gacaccctca
                                                                      540
```

```
600
ggaaggtcct ggtggaggtg ctggcagacc ccctggatca ccgggatgct ggagatctct
ggtteecegg ggagtetgag agettegagg atgeceatgt ggageaeage ateteeagga
                                                                      660
                                                                      720
gcctcttgga aggagaaatc cccttcccac ccacttccat ccttctcctc ctggcctgca
tettteteat caagatteta geageeageg eestetggge tgeageetgg eatggacaga
                                                                      780
agecagggae acatecaece agtgaaetgg aetgtggeea tgaeecaggg tateagetee
                                                                      840
                                                                      900
aaactctgcc agggctgaga gacacgtgaa ggaagatgat gggaggaaaa gcccaggaga
agtoccacca gggaccagcc cagcotgcat acttgccact tggccaccag gactcottgt
                                                                      960
tetgetetgg caagagacta etetgeetga acaettgett eteetgggae eetgggaage
                                                                     1020
agggacttgg tttgagggga gttggggagg ttgtaagaac accttgacaa tttcttgaat
                                                                     1080
attttggaca ttttaaacac ttacaaataa atccaagact gtcatattta gctggaaaaa
                                                                     1140,
                                                                     1145
```

```
<210> 5746
<211> 1242.
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (872)...(244)
<223> similar to gi2370153 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5746
ttttttttt ttctatttaa tagtgtctga catttattaa aaataaggaa aaaacctttg
                                                                    60
tacaggtagt gtattagagc agggaaggga gcagggctta ctgtgttgaa caaaaggcac
                                                                   120
ccatcagaga gacagctgca aattcagaag aaaacaggat tctaggcaaa actaactggt
                                                                   180
ccacaggaga aaatgagaga ttcgatttgg ttgccaggca cacttaagcc ctggcagcta
                                                                   240
tgtggcagga acacaagagg tctctgggga tggggaggaa atgggtctcg ctgaaggtga
                                                                   300
caggeteett gggggaegge cagetgtetg gateactgte caggggetgt gtecageteg
                                                                   360
gatacctccg aggtgagtcc acatcactag gagccacagt ctgttggtga gatgcggtgg
                                                                   420
atggcgatgg cagtggtagc gtaggtctgt gggcagaatg atgtagttgg ctggcagtct
                                                                   480
ggaggagtgg aggtgggttg gcagcagcgg ctgtgggtgg tctgtccagt atgtaacagg
                                                                   540
600
gcaaaagagg gcggaggcag cgcgctctag agtgcggccc aggagctgca gcaggagcct
                                                                   660
ggagcgctat teetggaaca aaggcaagca etacgeggga ggggacagga gegcagggga
                                                                   720
catcgcggcg gctcgagggg gagggaggcg cggagggagg gcgcctgtgg agaccctagc
                                                                   780
ggtggccact ggcacagcga actettecca gagcaccege ecceaggece aagggtetee
                                                                   840
eggeetagaa gteetegtee teeteeeate caaagaeeeg etteateteg geeaggaage
                                                                   900
eceggtaate attgageagg gggeteteet teetgatgta ggggateace caetgeaggg
                                                                   960
ctggccccgt gaggcgggtg atgaggaacg tcaccttcag ggcgtcgttg gagaacgtgt:
                                                                  1020
tetegteeae gaacatgtag gagetegtet geaegatgaa eteegggagt eggteggtat
                                                                  1080
ctccgtcaaa cgtctcggga aagggaatcg ggttcctcca gcgacgcgcc gcgggccgga
                                                                  1140
ggggcccggc caggagggcc ttcatcagct gcacccgacc gtccatcgtg ccgcgcgcg
                                                                  1200
tccgaagagt tacgctgggt tgcgtggggg tcagcgctaa gg
                                                                  1242
```

```
<210> 5747
<211> 922
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(923)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (638)...(922)
<221> misc_feature
<222> (638)...(922)
<223> similar to gi1389766 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>`5747 aattgagacc ctttgcatgt gatggcattc acaaggcaaa ttacttgctg aaagaatgcc 60 aagggtegga geagttggag etetatatga tggtgeeage tgtgggeage atggtgaeta 120 ggttggaagt ggcatgtgga gttgtcaggc accacctgcc atttaacttc tcatttttct 180 agtttgaaaa tggtatgago ttogttotto otttoagato catgagacaa tagaaacoat 240 caaccagetg aagactcage gggagttcat getgagettt gecagagace etcagggttt 300 catcaatgac tggcttcagt cccagtgcag ggacctcaag gtaaagaacc tangagaggt 360 ctgaagggac ttangtcagt gaggtgcaca gctgctttat tcatgtagca gctggtagga 420 gacccagagg aaggagtgag gggccagatt tttctttagc atgttccagg gtccattttg 480 caattaagca gggaaatggg ggcagagcca tcaagtgttg atttagtgct tactttgtct 540 gtcactgtgc ttcatcttgt cagggataca gagtggaaga cctgatctct gctttcaaag 600 cagectacat tetgtetgaa gaaactagge tagtatagee gggeatggtg geteacacet 660 gtaatcccag cactttggga ggccgaggcc gacggatcgc ttgaggtcag gagtttgaga 720 ccagcctggc caacatggcg aaaccccgtc tccactaaaa atacaaaaac ttagctgggc 780 gtggtggtgc accettgtaa teccagetae tggggagget gaggeaggag aatggettea 840 ttgaacccag ggaggcagag gttgcagtga gccgagatcc gtgttactgc gctccagcct 900 ggggtgacaa gcaagacttc ag 922

```
<210> 5748
<211> 3556
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (155)...(3198)

<223> similar to gi220826 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5748
cgacgatttc gtgtgggacc aacggacgga cggacggacg cgcgcaccta ccgaggcgcg
```

ggcgctgcag aggctcccag cccaagcctg agcctgagcc cgccccgagg tccccgcccc 120 gcccgcctgg ctctctcgcc gcggagccgc caagatgggg gacaagaaag atgacaagga 180 ctcacccaag aagaacaagg gcaaggagcg ccgggacctg gatgacctca agaaggaggt 240 ggctatgaca gagcacaaga tgtcagtgga agaggtctgc cggaaataca acacagactg 300 tgtgcagggt ttgacccaca gcaaagccca ggagatcctg gcccgggatg ggcctaacgc 360 actcacgcca ccgcctacca ccccagagtg ggtcaagttt tgccgacagc tcttcggggg 420 ettetecate etgetgtgga teggggetat cetetgette etggeetaeg gtatecagge 480 gggcaccgag gacgacccct ctggtgacaa cctgtacctg ggcatcgtgc tggcggccgt 540 ggtgatcatc actggctgct tctcctacta ccaggaggcc aagagctcca agatcatgga 600 gtccttcaag aacatggtgc cccagcaagc cctggtgatc cgggaaggtg agaagatgca 660 ggtgaacgct gaggaggtgg tggtcgggga cctggtggag atcaagggtg gagaccgagt 720 780 gccagctgac ctgcggatca tctcagccca cggctgcaag gtggacaact cctccctgac 840 tggcgaatco gagccccaga ctcgctctcc cgactgcact cacgagaaac cctttgaaga 900 cteggaacat cacettettt tecaacaact ttgtagaagg caeggetegg ggegtggtgg 960 tggccacggg cgaccgcact gtcatgggcc gtatcgccac cctggcatca gggctggagg tgggcaagac gcccatcgcc atcgagattg agcacttcat ccagctcatc accggcgtgg 1020 etgtetteet gggtgtetee ttetteatee teteceteat teteggatae acetggettg 1080 aggetgteat etteeteate ggeateateg tggeeaatgt eecagagggt etgetggeea 1140 ctgtcactgt gtgtctgacg ctgaccgcca agcgcatggc ccggaagaac tgcctggtga 1200 agaacctgga ggctgtagaa accctgggct ccacgtccac catctgctca gataagacag 1260 ggaccetcae teagaacege atgacagteg eccaeatgtg gtttgacaae cagatecaeg 1320 aggetgacae caetgaggae cagteaggga ceteatttga caagagtteg caeacetggg 1380 tggccctgtt ttgacatcgc tggggttttg caatcgccct gtcttcaagg gtggtcagga 1440 caacatecet gtgeteaaga gggatgtgge tggggatgeg tetgagtetg ceetgeteaa 1500 gtgcatcgag ctgtcctctg gctccgtgaa gctgatgcgt gaacgcaaca agaaagtggc 1560 tgagattece tteaatteea eeaacaaata eeagetetee ateeatgaga eegaggaeee 1620 caacgacaac cgatacetge tggtgatgaa gggtgeecee gagegeatee tggacegetg 1680 ctccaccatc ctgctacagg gcaaggagca gcctctggac gaggaaatga aggaggcctt 1740 ccagaatgcc taccttgagc teggtggcct gggcgagcgc gtgcttggtt tctgccatta 1800 ttacctgccc gaggagcagt tccccaaggg ctttgccttc gactgtgatg acgtgaactt 1860 caccacggac aacctctgct ttgtgggcct catgtccatg atcggcccac cccgggcagc 1920 egtecetgae geggtgggea agtgtegeag egeaggeate aaggteatea tggteaeegg 1980 cgatcacccc atcacggcca aggccattgc caagggtgtg ggcatcatct ttgagggcaa 2040 cgagactgtg gaggacatcg ccgccggct caacattccc gtcagccagg ttaacccccg 2100 ggatgccaag gcctgcgtga tccacggcac cgacctcaag gacttcacct ccgagcaaat 2160 cgacgagate etgeagaate acacegagat egtettegee egeacateee eccageagaa 2220 gctcatcatt gtggagggct gtcagagaca gggtgcaatt gtggctgtga ccggggatgg 2280 tgtgaacgac tcccccgctc tgaagaaggc cgacattggg gtggccatgg gcatcgctgg 2340 ctctgacgtc tccaagcagg cagctgacat gatcctgctg gacgacaact ttgcctccat 2400 cgtcacaggg gtggaggagg gccgcctgat cttcgacaac ctaaagaagt ccattgccta 2460 caccetgace ageaatatee eggagateae gecetteetg etgtteatea tggecaacat 2520 ecegetgeec etgggeacea teaceateet etgeategat etgggeactg acatggteec 2580 tgccatetea etggegtaeg aggetgeega aagegaeate atgaagagae ageeeaggaa 2640 cccgcggacg gacaaattgg tcaatgagag actcatcagc atggcctacg ggcagattgg 2700 aatgatccag gctctcggtg gcttcttctc ttactttgtg atcctggcag aaaatggctt 2760 cttgcccggc aacctggtgg gcatccggct gaactgggat gaccgcaccg tcaatgacct 2820 ggaagacagt tacgggcagc agtggacata cgagcagagg aaggtggtgg agttcacctg 2880 ccacacggec ttetttgtga geategttgt egtecagtgg geegatetga teatetgeaa 2940 gaccoggagg aactoggtot tocagcaggg catgaagaac aagatootga tottogggot 3000 gtttgaggag acggccctgg ctgccttcct gtcctactgc cccggcatgg acgtggccct 3060 gegeatgtae ceteteaage ceagetggtg gttetgtgee tteecetaea gttteeteat 3120 cttcgtctac gacgaaatcc gcaaactcat cctgcgcagg aacccagggg gttgggtgga 3180 gaaggaaacc tactactgac ctcagcccca ccacatcgcc catctcttcc ccqtccccca 3240 ggcccaggac cgcccctgtc agtcccccca attttgtatt ctggggggag gagccctctc 3300 ttcctgtggc cccaccttgg ccccacccc ctccactatc tcctgccgcc cccactctgg 3360 etggettete teccetgece caaacetete tectetetet tttetgtgte agtttetete 3420 cetetectea cecetetate catteetece geeceageea cetecetggg etettttta 3480

```
<210> 5749
<211> 2242
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (75)...(1360)
<223> similar to gi595380 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5749 tgctgccagg gcgccgggcc cggggaggcc ggggtctcgg gtggccgccg gcccaggcgc 60 tggacggcag caggatgggg aaggcgaagg teceegeete caagegegee eegageagee 120 cegtggetaa geegggteet gteaagaege teacteggaa gaaaaacaag aagaaaaaa 180 ggttttggaa aagcaaggcg cgggaagtaa gcaagaagcc agcaagcggc cccggtgctg 240 tggtgcgacc tccaaaggca ccagaagact tttctcaaaa ctggaaggcg ctgcaagagt 300 ggctgctgaa acaaaaatct caggccccag aaaagcctct tgtcatctct cagatgggtt 360 ccaaaaagaa gcccaaaatt atccagcaaa acaaaaaaga gacctcgcct caagtgaagg 420 gagaggagat gccggcagga aaagaccagg aggccagcag gggctctgtt ccttcaqgtt 480 ccaagatgga caggagggcg ccagtacctc gcaccaaggc cagtggaaca gagcacaata 540 agaaaggaac caaggaaagg acaaatggtg atattgttcc agaacgaggg gacatcgagc 600 ataagaageg gaaagetaag gaggeageee cageeecace caeegaggaa gacatetggt 660 ttgacgacgt ggacccagcg gatatcgaag ctgccatagg tccagaggcg gccaagatag 720 cgaggaaaca gttgggtcag agcgagggca gcgtcagcct cagcctcgtg aaagagcagg 780 cetteggegg cetgacaaga geettageet tggactgtga gatggtggge gtgggeeeta 840 agggggagga gagcatggcc gcccgtgtgt ccatcgtgaa ccagtatggg aagtgcgttt 900 atgacaagta egteaaacea acegageeeg tgaeggaeta taggacageg gteagtggga 960 tteggeetga gaaceteaag eagggagaag agettgaagt tgtteagaag gaagtggeag 1020 agatgetgaa gggcagaatt etagtggggc acgetetgea taatgaceta aaggtaetat 1080 ttettgatea tecaaaaaag aagatteggg acacacagaa atataaacet tteaagagte 1140 aagtaaagag tggaaggccg tctctgagac tactttcaga gaagatcctt gggctccagg 1200 tccagcaggc ggagcactgt tcaattcagg atgcccaggc agcaatgagg ctgtacqtca 1260 tggtgaagaa ggagtgggag agcatggccc gagacaggcg ccccctgctg actgctccag 1320. accactgcag tgacgacgcc tagcagtcct gccctgctgc tgctgccgcc ccgctacaga 1380 ggcaatgtga ccagtcacag ggacagatca catctcccca gagtggcaac tctggtgaaa 1440 cettttcaga atcatggcag aggggcgtgg cgtggtgcta ctgagaaggt cetectteet 1500 cttgactttg tggtctgaaa cctggtctta ctgtccatgt gtgtttgggc ccggatggtc 1560 agggtgggga gcagggacgg ccatgggcac gcctggccac gctttaccga ctgctgaccc 1620 cetgggccag gtgaggttgg ggcctgtggg ccgccagtcc atacggtgct gtcactgccc 1680 atctteggtg acaccetggg gtgaggtget cageacette etetegagga gecacatttt 1740 ceteetttgt gttaggggae ataacaaget etgetggget tgagggaeee agaceaggtg 1800 tetgeagtea geteetgaga cacagetgge eggeacaaca ggtgttacat caggggttte 1860 1920 ggtcacccag cagaggette tececatage acgaggatgt gttgcctggg caeggtgact 1980 geggttatte etggaggteg geagaeatge caacettggg etatttgage tggagaaget 2040 atgtgatgct agccggtggc tttctgggct aggccccagt ttgaggctcc cctgggaact 2100

```
agagccagga acagccagtg gcactgacaa ggggacggag tccaaggcgt tattgggcca 2160 cctgacagct ggacagaaaa ggggcagaca caccgaggat gcgatttaaa ataaatgcag 2220 atgtttactt ggaaaaaaaa aa 2242
```

```
<210> 5750
<211> 2329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2330)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2194)...(801)
<223> similar to gi470340 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5750 tecceacetg aacetgtggt taccaatget atgegagaag acetggegga tatetgttac 60 atcagggctg tgaccgtcta cgacaagccc gcatctttct ttaaagagac acctctggac 120 ctgcagcacc ggctcttcat gaagctgggc agcatgcact ctccgttcag ggcccgctca 180 gaacctgagg acccagtcac ggagcggtcg gccttcacgg agcgggatgc tgggagcggg 240 ctggtgacgc gtctccgtga gcggccagcc ctgctggtca gcagcacgag ctggacagag 300 gacgaagact tetecateet getggeaget ttagaaagta gagtttgaac aactgactet 360 tgatggacac aaccttcctt ctctcgtctg tgtgataaca ggcaaagggc ctctgaggga 420 gtattatage egecteatee accagaagea ettecageae atceaggtet geaceeetg 480 gctggaggcc gaggactacc ccctgcttct agggtcggcg gacctgggtg tctqtctqca 540 cacgitectee agiggeetgg accigeceat gaaggiggtg gaeatgittg ggigetgitt 600 gcctgtgtgt gctgtgaact tcaagtgttt acatgagctg gtgaaacatg aagaaaatgg 660 cctggtcttt gaggactcag aggaactggc agctcagctg cagatgcttt tctcaaactt 720 tectgatect gegggeaage taaaccagtt eeggaagaac etgegggagt egeageaget 780 ccgatgggat gagagctggg tgcagactgt gctccctttg gttatggaca cataactcct 840 gggccagagg ctaaaacccc aggacccctg ctgtccttcc cgcagcttct tcttggagtc 900 tcagggcaaa ccctttcgag cagcacctcc cagtggccag aagctgaaat gacagcagtg 960 gtactgcctg gtaaaagaat tggttctgtg acccgggaag ctttggttgg ccttgatttc 1020 ttctctggag gcttggaaac gcttcctctc ttcttctgtt cttcacgccc catgcccctg 1080 ctagcgtatt actgttctgt gacttccctg tgacctctgc agaactcctc atcctgcgtt 1140 tggtctccag gtgtcccctt tctgccgtgt tcctaacatt ttgattcctg tcttgaaaaa 1200 agcacctgct gcaccgtaag cccagggatg tggcagctgc agtgggcttg gctttgtgag 1260 gaactgagtg tgtccacgtt gggggaacat catacttgat acacacgttt ttatttgcac 1320 aaagaaaatg ctgtttttgg agccagaatt ttcatgtctg atttatggtg attttcttaa 1380 gaaccagaac tgctggcaga aagggggcac ccacacgctt agatagccga tgtcttatta 1440 gagggcagtt tgtggttcct gatttggaaa ttaacattct ccaaacattc cagtccaatg 1500 aaagttttat cogotttooc atataaaaat tottoocatg agagtgactt gattotoaca 1560 atcccgttgg agtcgtgtt gagtcctaca gtattaggtt cagcattgcc atctccaagt ·1620 gctcttcgta gggaaacagt ttctggtcat gacaagcttc cacttcccat ctgatcccgg 1680 cccggccggc ctctgcccga gttccctgca tggtgtggga gtgtggggca tgctagcttt .

```
acgecqqcqc ccagttettt caettecaet ggagteetge agggacaget eggggaccat
                                                                     1800
gcaggcccgg gtgggcgtgg ggactcaact agctcagtgg tgaacagctg gcacgtctgt
                                                                     1860
gggttgtgga cggtaaaggc cacgtagacc tcaggagccc gctggtgctc ccggcaggca
                                                                     1920
gccagcctcc gcaggacccc gaccagcgac acgatggctt ctgggcaata cagcacgtca
                                                                     1980
gcaaatagct ccggtggccc tgggtggact ccttggccat cagggtctcc gccagcacct
                                                                     2040
cgtacagete atecaaagge tetgtgtgga cageetegtg etttttgatg agttetgaga
                                                                     2100
gaaagcaccg ggcatacttg actgacggcg ggtgcttcac acacacagga tgcttcacag
                                                                     2160
tctacttctg caaaatatcc cgcagcagct cagaatctga tgagtctctt aactttgctt
                                                                     2220
ctaagctctg ccaggggaag gagcgcaggg cgcgccgc caggaagcgg cgcttgaaac
                                                                     2280
tctgcagcaa gagttcgctc cccgacgaaa tcgtcggtnn nngaaaaag
                                                                     2329
```

```
<210> 5751
<211> 2166
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2167)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1382)...(1928)
<223> similar to gi433011 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5751
ttttttttt ttatttaac aaatccaaag tttaattatt aaggattaca aatattttta
                                                                       60
gcagtgtagt taggcaatcc aagcctggac ttccacttca ttcctactaa actacttqca
                                                                      120
gagetgagga ggeaggagae tagagtaeag agageatttt agttetatea eaaaggteta
                                                                      180
gaactgtete tacagteaca ggaagaaaca ggtatggeac egtggeeaga agggggtagg
                                                                      240
tattcacaga gagtgggtat caaggtgtca aactttgtct tctgatagtt ttccagagat
                                                                      300
tectgtagag aagggageag ggagageeta etateegaaa eeatteeetg aaceetetga
                                                                      360
attetgaage atgtggattt eteagtettg ttetaceeat eccettteee agetttetge
                                                                      420
tectteceae teacetttee ttececetgg ceattttett ceteateaga gtetaaaace
                                                                      480
aagtccccta tggtaatgac ggagctgcac agagacggag gacacactgt aggagggaaa
                                                                      540
ccagaatcaa actactactt ctagatgaac acaggctctt gagagtcccc aagagaggag
                                                                      600
gctgttgatc caatcctgac tcagactacc tacctggctt cctggcccta qqaqqtaata
                                                                      660
atgatagtet cagggggtee atgtageaat ceaageaatt eetgaggtga gageaageaa
                                                                      720
agaggatagg atgaagggaa ggcaggcaaa gaatgtgctc ctagtaagaa gcaactctgt
                                                                      780
tecacteact cettttgete tgtggcagge aagteaactg ggtteteett cagageeett
                                                                      840
cccccaggg tetggcatgg actettagae ttcccagtgg aggetgetet tgtgcccatg
                                                                      900
gctaggtctg ctgtgtatat cgcatgttct tccttgctct caggcttaga tatgacctgg
                                                                      960
gttggtgage cgagatteet aaagggaaac ageatgactg tggggegete ettatggeet
                                                                     1020
cccctagtgg aggcccattg ggactgaact cttcgtcggc ctagaggggc cagattgaag
                                                                     1080
tgtcggccag ctagaggttc tgggtgcgtc cttgaagatg gtccctgagg aagatgtgtg
                                                                     1140.
ccaggcttgg cttttggcag gggattgtgg agtgctagtc tttgttgctg aggaggattc
                                                                     1200
tgttccatgg gctcagccag gttcactgag tcagtaacag agcactctgg aagcagccac
                                                                     1260
cccatgtcca caccatattg tctccaggca agagaagagg tgatagagac tccaggctgc
                                                                     1320
```

```
atccaactca gcacatcctg aagctgctgt gcctgcggtg taggcagtgc tttctccagc
                                                                     1380
tgacacaagt actcaaaaag cagcttttcc atggcagcca gaaagggttc cccatactct
                                                                     1440
tgttcaagtt cctgcagctt cgaggccaaa tccacaggag cctctgacag ctgcttcacc
                                                                     1500
tgctggtaaa aagtttcctg tgcctccaaa atcttcctca gatcctgctt tgtagccttg
                                                                     1560
ggateeegea etataggtee agattetgga aagtggtgat teagggettt eaggaettgg
                                                                     1620
geccaaggee ggecetgeag gateagetee accaecaeet tggeetttag geccatacaa
                                                                     1680
aggegttegt ggtgeeggta gegaaceaag eeaggggeaa eagegegeag agategeaga
                                                                     1740
aactccagta ctcgcggaaa atgttccacg cagcgtccgc gcacaacctg ccagctagcc
                                                                     1800
geggeggega agegtagage tgegggaeee gecaecaggg gegtageeat ggteggeggg
                                                                     1860
etcegecegg aggeggteee teegggttee teacceggat gggtgagget tteegateae
                                                                     1920
tectagggge ggggettetg geaacteest gtegeteegg tetgtegget etgggtacet
                                                                     1980
cgcgatctga ctcggctccc ttccatcggc ccccagaatt ctgggggagg gggtcttctg
                                                                     2040
gctcgggctg gaggagcctg agtggagaag ctgaccgtct ccagtggcac tgggtcgctc
                                                                     2100
agetttaaac gtegeegetg tetegageee gagggtgeet caetteennn negetactag
                                                                     2160
cttccc
                                                                     2166
```

```
<210> 5752
<211> 3136
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (3137)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3125) ... (730)
<223> similar to gi3273089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5752
ttttttttt ttagattttc caactacaca gtttattaag taaagtatct caacaatatc
                                                                       60
tcagagcagt aaaaaccaag gcatccccaa acactgcatg cgtgacttag accagcaaag
                                                                      120
aagteeteaa aetttgeace aagteeeaae attggeeage agggggeaag tggtgaagte
                                                                      180
ttccggaacc caagtgeett ggcgctgact ggcccccatt cgatgagtga gcttggatga
                                                                      240
cagggccggc ttggagatag gacaatcggc ttcacagggt ccttttcatg tccgatcccc
                                                                      300
ttaagcattc ccgagggagc cacaaggaac ttgggggcgg tccgtgcaaa gcgtcggcat
                                                                      360
tgaacagggg gtctgtttgg gaggcttgaa tggctctggc tgcctctggg gtggccttca
                                                                      420
agccaaactg ggaaacgact tgtctataac ccctggggaa ctcgaagtgt tcgatgctca
                                                                      480
ctcgggaagc actgataacc ttccccatag gggaaacgac tcacaaacac aggactccgt
                                                                      540
cagtagtttc tgcagagaaa cttaaaatca tgaaaagggt catcaatcaa cagatctcag
                                                                      600
aagtcactgt gcagggacta ctgagggccg cgagaggaag tgcaaacctc agctgaaaag
                                                                      660
caactcaggg tggctgagtg agccctcact tcccggacca cccgcacgtg cagccaacac
                                                                      720
ctcccaacta cttgggccaa gtcggctctt cgcctccaag tggaggctgc tgggtctctt
                                                                      780
cggtctcctc ctcgccccaa gtcctgtttc tccctctggg cgtcggaacc aacctctgcg
                                                                      840
gtgcggatca ttttcctttc gnccatgggg cggcgggcca atgagagcct caatgtccct
                                                                      900
caatagttta tcacttcctt ttccagaagg gcgtttgcca gcgcctgcaa cttgtcccag
                                                                      960
gttgtcctgc agcaccttct cggtgtgtct gtaggccttg gccaccagca gtcttgcttc
                                                                     1020
```

```
atggtccatc atctgctgca ggccttggct gaaggggcgc cgcccgatgc ccatgaggcc
                                                                     1080
ctcctgcgcc tcagggaagg agatgggccc gatgccaggt gccatcccaa actgcttcac
                                                                     1140
catggagtag gcgatgcggg tgaccttcct caggtcgtcc tgtgccccag aagtgacctc
                                                                     1200
gttgaaggac agtgcttccg aggcccgtcc tcccaaggcc atgcacatcc gctcaaacag
                                                                     1260
ctgctccttg gtgaagaggt gctggtctct ggggagcatc tgagcaaagc ccagggcggc
                                                                     1320
gtttgtccga ggggttatgg agacettcat cacggcetee gtgtgeteea geatecagee
                                                                     1380
caccaaggcg tggcccgact catgaaacgc aaccactttc tgttcttcct tggacaggat
                                                                     1440
ettgetettt ttggcagtee etgegaggae gegeteeaeg gegtaetega agttgagagt
                                                                     1500
gtgcacgaga agtgtgtccc taccgcgccg cgtgcagcac agcctcttgc cagatgttgg
                                                                     1560
cgatgtcagc cccactgaat cctggtgtca gctctgccag acgctgggag taaaaggtgc
                                                                     1620
tggactgggt cagcttcagg ctcttcaggt gctgctcaaa aatctcccgc ctctcctgca
                                                                     1680
gcgtggggag atcaatgaag acgtgccggt ccagtcggcc tggcctcatc agagcaccgt
                                                                     1740
ccaaaatgtc agctcggttc gtggacgcca ggacgatgac atggtctgtg gtacccattc
                                                                     1800
catccattta aaccagaagc tggttgagcg tctgctcctc ctccgtgttg gagaagccgg
                                                                     1860
acatggtggt ggagcgcttc ttgcccaccg cgtcgatctc atcgatgtag acgatgcagg
                                                                     1920
gggcccgggc tcgggcttcc ttaaagaggc tccgcacacg ggcagcgccg aggcctccaa
                                                                     1980
tgacctccac gaactctggg ccggccatcg ccaggaaggg cacctgagcc tccgtggcca
                                                                     2040
eegeettgge cageagegte tteecacage egggggggee gageageagt gegeeetttg
                                                                     2100
ggaccttggc gccaagctgg aggaagcgtt ctgggctctt cagataatcc acaaactcgc
                                                                     2160
ggacttecag tttggetteg tgeattectg ceaegtettt gaagetgact cetttececa
                                                                     2220
tcttcccatc cacaatggtg aaacgagcca ttttaagctg attaaaagca ctgaatccac
                                                                     2280
ettecettee agteateeeg geeagaegga aaacatacea caggatggee aggeeeactg
                                                                     2340
ecgtcatece cacagagtae agggeattte caaagaatee tgttegettg taggaaactg
                                                                     2400
ggatcctgtc cttggcctcg atattcagct catcttcagc tgctcgaagc ttctcttcaa
                                                                     2460
acttgtcaat atttgcaacc tgcattcggt acatcaaggc tagccgaggc cgcccaaaca
                                                                     2520
ccacggetee agggtgeagg tagaetteea ccacgteget eteaggeace acetggaege
                                                                     2580
getgeacete gecettggee ageatetegt ggacaaagte gttecaggaa atgetgeete
                                                                     2640
egetggtget gagageatte aggaggetea tgacaacege gatgaceage aaggtgegea
                                                                     2700
geogeteteg gracatetgg tegteceget caeggegtet ceteteetet tegteetett
                                                                     2760
caggogoctt coccttogac tratecttet cettattett etgetteaac ettgaggtgt
                                                                     2820
taaaatagaa agtaccacct aaaagttgcc agagtctgac tggattctga actaaatgtt
gtttcaacaa caatccgttg atcccttcaa aggtaggggt tagcagtctc aattgtaagc
                                                                     2940
tetgeagage teggeeteea geeteggega ggteeeeegg aggeetgetg geeatgtaeg
                                                                     3000
geogeeeet ceegggeetg geggggaace etggaeteea ggcegggeet gggeeeeaea
                                                                     3060
geggeegagg accegggeet ggaeeeegge ggagggeaeg gageageage ageageaegg
                                                                     3120
ccatgttggc ctgaaa
                                                                     3136
```

```
<210> 5753
<211> 2137
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (516)...(1278)
<223> similar to gi5420389 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5753
tttttttttt ttctgtttat gacactttat tgatgctggg ggggtgggga ggagacctgg

```
agaaatatgt gggggcaaga gtccccaggt ggggacaggg aaagtgttga agcctggcca
                                                                       120
ctactgggca gggaagacag agttgccact gtatgcacag gggatgagca gctgccggta
                                                                       180
ctccaggggc aggtgccgct ccactagcac gtgcagtgag acttggtcag tgaccaggcc
                                                                       240
                                                                       300
etgeegeege ateageaget ceaggteete tggetteaea gtettgegge cageatgage
agcaaatacc tecagateat cacaaagatg etggaaatat ttatetagge acttetecae
                                                                       360
catctcaaga gccttcctct ccatggggca tcttgggcat aagaagctaa aagagttttc
                                                                       420
acattagtgg ctcatatece agecttgtgg ggatettgee ggggeeetgg ggeeggtggt
                                                                       480
ccggggccta gggggatgcc ctgaccaaca gaggctctgc aggctctgaa gataagactg
                                                                       540
                                                                       600
cagcaccagg cgctggggct ggctcaagaa actgatgatg tcgcctggcc tggagagact
caggggtgct ggaggccgac tetggaettg etgecetgee agaggeatee teateceetg
                                                                       660
aagatgetee tggeeegtea geeteageag teeeetggga teeetetget tetgteaeet
                                                                       720
ctgtgtgtcc ctcagcctct tctaccctgc tgggtccttg tgctcctgtt gcctccattt
                                                                       780
cactcacact cacaccttct tettecatet ttttetetge etetteaact ceategtgta
                                                                       840
agggetetae tteatettet eeagagaeae eaetgetggt geteaggaag eeeagageaa
                                                                      900
aggeattgae etectetgee teteetgeea gaaactggge tggttteeca gggeetgagt
                                                                       960
gaaggggaga gaatacaggc cggagacgca gcaggccaag gctgcatagc tcagagaagg
                                                                      1020
gtaaagatgg accagcagac ccagtcctgc ccactgagga aagacaaagc cagaggcagc
                                                                      1080
accaggacat ggatctgaag teteetggee caacatggae tetgetettg gatgaaggag
                                                                      1140
geagecacag ceagggtget etaggggeac agaggggett gaggaaggaa aactaceatt
                                                                      1200
gtcaactctc acccaagcta aatttggctc caggccacca gtgccacaca ctcactattc
                                                                      1260
ttetgeagee caggeceact getetgtgte ttgegacegg cageetgete agegtettea
                                                                      1320
gccccagtgt gaggcgtgca gggcagggag tgatacacgt tgggggagcc aaccatgggc
                                                                      1380
tgagagaacg gctgggtgtc ctccaacaca atgtttggag gagccaggga agtatctcgc
                                                                      1440
agatecegea aaaaggeace caegtetaca geteggeggg etggaggtet gegggeeaag
                                                                      1500
ccaggeetet geactgactg tggetgaaga ggtgtggeaa aggteaggtt gagggatetg
                                                                      1560
                                                                     1620
gtgagggaag aggcatcagc attcccttga ggctcttggg agagagacag cccctggtcc
actecetget gaaacactga cagteteage etetgtttee teetgeeagg ggeeageaga
                                                                      1680
cctggagcca gggttgtggg gggctcgagc tcaggaagtt gcagctccag gctgccgcaa
                                                                     1740
etgetetett gtetggaggg ttggacegee tgeggtgetg geaetggett caetacegae
                                                                     1800
tcaggcatca ggatggaaga ttctggggca gttagtagga tgttcttcag cagcgtccga
                                                                     1860
ggtgtetgtt cetecaagtg cecaetggee tgaatatggg cegatetgee aacagacetg
                                                                     1920
getecatggg aacgecetet ggetategte ettgtitgge caeteaaett eetgggggaa
                                                                     1980
gccgtttcaa gcagggctct ccgggctcca gcccgagcac tccggggtcg ccgcggggtg
                                                                     2040
egegggteeg etgtateeag eaegegtege ageagegtge geggegtgga gtegetgtea
                                                                     2100
gggttgtggt cagccatcgt ctcggccccg gacgaaa
                                                                     2137
```

```
<210> 5754
<211> 824
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (319)...(636)
<223> similar to gi3249069 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5754
ggggatgggg cctctatact tgcaagggag aggaacaggg accaggctgc cccacggtcc 60
ctgaagggtc caaggagggg ccctccccat ggccctggag agtgggcctg ggtggtacct 120
```

```
gctccaggca gggaaactgg gggctcgccc ttctcctgtg aggggagcca ggcacacagg
                                                                     180
gcccattggt gtttgggatg tggacagagg ggcagggggc tgggagaagg ctaagccgag
                                                                     240
gggtcctgtt tgtgcctccc tggcattttt tgcagacaag ggcttgggat ggaccctcag
                                                                     300
ccccatggta cgccctgccc agtttccaga tgccctgtcc acttacccta ggtagccccc
                                                                     360
                                                                     420
caccccatca gtgccgagtc cttgtcccta cctccagctt cctccagcct caaaccgcct
ctggatctag ctgtccttct ccgagtggca cgcctgcccc agggatgccc cctttccctc
                                                                     480
cccccatgc ccagagcccc gcctgcctca gcgggtcagg ccttcagaac actgccaccc
                                                                     540
acccagtttt ataatcccgc teceteteca ggcaacccca eccaccagec taggeetget
                                                                     600
cctccaccct tcccgggagg cagcccggg atgctgagag ttggtggagg ggccaggctg
                                                                     660
gacgetteet gtgggagtee cetecagace tggetggeee etggeageea cagaaaceae
                                                                     720
gatggcaaaa aatctcattg gttctcaagg actaacctgt gggggaaagc aatagagaca
                                                                     780
ctctttttct ctctttttt aaagatttat ttcttgaaat aata
                                                                     824
```

```
<210> 5755
<211> 1212
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1213)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (128)...(940)
<223> similar to gi190510 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5755 ggccatagga aaaggcccgg cgtccacgcc tacctacagc cctgcaccca cccagccggc 60 ecetagaate gegteageee cagageeeag ggteaceetg gagggaeett etgeeaeege 120 eccageetea tetecagget tggetaagee ecagatgeee ecaggteeet geageeetgg 180 ecetetggee cagttgeaga geegeeageg egactaeaag etggetgeee teeaegeeaa 240 gcagcaggga gataccactg ctgccgctag acacttccgc gtggctaaga gctttgatgc 300 tgtettggag gecetgagee ggggtgagee egtggaeete teetgeetge eeeeteeace 360 cgaccagetg eccecagace caccgtcace accgtcgcag cetecgacee ecgetacgge 420 gecetecaca acagaggtge ecceaecece gaggacectg etggaggege tggageageg 480 gatggagcgg taccaggtgg ccgcagccca ggccaagagc aagggggacc agcggaaagc 540 tegaatgeac gagegeateg teaageaata ceaagatgee ateegageee acaaggetgg 600 ecgageegtg gatgtegetg aattgeeegt geeceagge tteececeaa tecagggeet 660 ggaggccacc aagcccaccc agcagagtct ggtgggtgtc ctggagactg ccatgaagct 720 ggccaaccag gatgaaggcc cagaggatga agaggatgag gtgcctaaga agcagaacag 780 ccctgtggcc cccacagecc ageccaaage cccaceetca agaactegec agtegggate 840 agececaaca gecaaagege eccecaaage cacatecace agageceage ageagetgge 900 cttcctagag ggccgcaaga agcagctcct gcaggccgca ctgcgagcca agcagaaaaa 960 1020 ggcctcgcgc aatgggctgc ctgtggacat caccaaggtg ccgcctgccc ctgtcaacaa 1080 ggacgacttt gccctggtcc agcggcctgg cccgggtctg tctcaggagg ccgaccggcg 1140 ctatggtgaa ctcaccaagc tcctcgtgcc aagcaggccg tnntcatntt acagaggtat 1200

```
<210> 5756
<211> 756
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (384)...(722)
<223> similar to gi804809 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5756 getcaagtga teeteetgee ttagecacet gagtagetgt gaetgeagge atgtgeeace 60 acgttcagct aacttttaca ttttttttgt agagataggc tctcagtatg ttgccctggc 120 tggcctcgaa ctcctggggt caagcaatcc tcccaccgca gcctcccaaa gtgctaggat 180 gacaggtgtg agccactgca ctgcaaaaat acagaagacc aaattattaa aactagaaat 240 gagaggggac attactattg ttcttagaga cataaaaagg attataatat gaataaaaag 300 gattatacat ataaacaata tatgctaata attggataga gctggatgaa agacacatta 360 ccagaaagat atgaactact gaatctgact tgagaaaaaa acagaaaagc tgaatagaca 420 gacctatgtc aagtaaagag attgaggtag taatcaaaaa actttccact aagaaaagct 480 gaagaccagc aggcagcctc actggtgaat ctaccaaata cttaaagaag aattaacacc 540 aatccttcat aaagtctttc aaaatacaga tgaggaaaga acatttccta acttattcta 600 tgagggtgat attaacctgg tatccaaact aaagacatca cacacaaaaa attacagacc 660 agtatttctt atgaatgtag atggaaaaat gcttgacaaa atctggcaaa ccaaattcaa 720 cggagtattc tgtaaacatg aagcagataa taatag 756

```
<210> 5757
<211> 2932
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (152)...(1752)
<223> similar to gi5834428 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>	5757					
agaaccaccc	gtccggccgc	ctcgagcgcg	gtcctagcgt	tcagcggact	cgcgcggcct	60
cgatctctgg	actcgtcacc	tgcccctccc	cctcccgccg	ccgtcaccca	ggaaaccggc	120
cgcaatcgcc	ggccgacctg	aagctggttt	catggcagcc	tcaaagaagg	cagttttggg	180

```
gccattggtg ggggggtgg accagggcac cagttcgacg cgctttttgg ttttcaattc
                                                                    240
aaaaacaqct qaactactta qtcatcatca aqtagaaata aaacaagagt tcccaagaga
                                                                    300
aggatgggtg gaacaggacc ctaaggaaat tctacattct gtctatgagt gtatagagaa
                                                                    360
aacatgtgag aaacttggac agctcaatat tgatatttcc aacataaaag ctattggtgt
                                                                    420
cagcaaccag agggaaacca ctgtagtctg ggacaagata actggagagc ctctctacaa
                                                                    480
tgctgtggtg tggcttgatc taagaaccca gtctaccgtt gagagtctta gtaaaagaat
                                                                    540
tccaggaaat aataactttg tcaagtccaa gacaggcctt ccacttagca cttacttcag
                                                                    600
tgcagtgaaa cttcgttggc tccttgacaa tgtgagaaaa gttcaaaagg ccgttgaaga
                                                                    660
aaaacgagct ctttttggga ctattgattc atggcttatt tggagtttga caggaggagt
                                                                    720
caatggaggt gtccactgta cagatgtaac aaatgcaagt aggactatgc ttttcaacat
                                                                    780
gtcattcttt ggaatgggat aaacaactct gcgaattttt tggaattcca atggaaattc
                                                                    840
ttccaaatgt ccggagttct tctqaqatct atqqcctaat gaaaatctct cataqcqtqa
                                                                    900
aagctggggc cttggaaggt gtgccaatat ctgggtgttt aggggaccag tctgctgcat
                                                                    960
tggtgggaca aatgtgcttc cagattggac aagccaaaaa tacgtatgga acaggatgtt
                                                                   1020
tettactatg taatacagge cataagtgtg tattttetga teatggeett eteaceacag
                                                                   1080
tggcttacaa acttggcaga gacaaaccag tatattatgc ttttggaaggt tctgtagcta
                                                                   1140
tagctggtgc tgttattcgc tggctaagag acaatcttgg aattataaag acctcagaag
                                                                   1200
aaattqaaaa acttqctaaa qaaqtaqqta cttcttatqq ctqctacttc qtcccaqcat
                                                                   1260
tttcggggtt atatgcacct tattgggagc ccagcgcaag agggataatc tgtggactca
                                                                   1320
ctcagttcac caataaatgc catattgctt ttgctgcatt agaagctgtt tgtttccaaa
                                                                   1380
ctogagagat tttggatgcc atgaatcgag actgtggaat tccactcagt catttgcagg.
                                                                   1440
tagatggagg aatgaccagc aacaaaattc ttatgcagct acaagcagac attctgtata
                                                                   1500
taccagtagt gaagccctca atgcccgaaa ccactgcact gggtgcggct atggcggcag
                                                                   1560
gggctgcaga aggagtcggc gtatggagtc tcgaacccga aggatttgtc tgcccgtcac
                                                                   1620
gatggaagcg gtttgaaacc tccagattaa tgccggaggg aaagtgaaat tccgttattc
                                                                   1680
1740
tggtattcca taaaacctac caactcatgg attcccaaga tgtgagcttt ttacataatg
                                                                   1800
aaagaaccca gcaattctgt ctcttaatgc aatgacacta ttcatagact ttgattttat
                                                                   1860
ttataagcca cttgctgcat gaccctccaa gtagacctgt ggcttaaaat aaagaaaatg
                                                                   1920
cagcaaaaag aatgctatag aaatatttgg gggttttttt ttttttaaa catccacagt
                                                                   1980
taaggttggg ccaqctacct ttggggctga cccctccat tgccataaca tcctgctcca
                                                                   2040
ttecetetaa gatgtaggaa gaatteggat eettaceatt ggaatettee ateqaacata
                                                                   2100
ctcaaacact tttggaccag gatttgagtc tctgcatgac atatacttga ttaaaaqqtt
                                                                   2160
attactaacc tgttaaaaat cagcagctct ttgcttttaa cagacaccct aaaaqtcttc
                                                                   2220
ttttctacat agttgaagac agcaacatct tcactgaatg tttgaataga aacctctact
                                                                   2280
aaattattaa aatagacatt tagtgttoto acagottgga tatttttotg aaaaqttatt
                                                                   2340
tgccaaaact gaaatccttc agatgttttc catggtccca ctaattataa tqactttctq
                                                                   2400
totggatott ataggaaaag atactttott ttttcttcca totttccttt ttatattttt
                                                                   2460
tactttgtat gtataacata catgcctata tattttatac actgagggta gcccatttat
                                                                   2520
aaattaagag cacattatat tcagaaggtt ctaacagggc tggtcttaag tgaaccactg
                                                                   2580
tgtatataaa tatgttggaa aacagctgta tacatttttg ggcaacggtt atgcataata
                                                                   2640
tttaccagga gaattttttt cttaacaagc caacatttaa aatttatgtt ttatgtcaat
                                                                   2700
aaaagaaaat atactttatt gtgacttcaa ctatatttct tatcccttac atttttattt
                                                                   2760
aattgtotta gottaaaaaa agaagaaact gtggaatact acaqtaaata ttqttttcaa
                                                                   2820
acacaagcaa taattcaaat agttattttt cttttgaatt aattttagac atattttgga
                                                                   2880
tcctattgag gggataagag gatgtcaaaa aagttaaata cctaagtaga aa
                                                                   2932
```

<210> 5758

<211> 777

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (1)...(778)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (519)...(107)
<223> similar to gi493055 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5758 tttttttttt ttaagggaga acagttttat tagcatcaca gggtccattt ttccctttcc 60 atccaagcat ccagagtctg gtgtccttta atcagttggc aggttcaacc tggaggccac - 120 tggagetgee ggeeeceaag tacatgaatg tgeagatgat acacagattg tgeaceeage 180 ttcccatcgt tgatcacaag tcggtatcca tctcccaggc cctcagcctt tgctgtctgc 240 ttggccacaa ggagtaggtg tcctagaagc tatagagaga gcggagggac ataggtggct 300 getggtette ttetteagee tggetaatee gaggaatggg ettettagga atgaccagga 360 agtgcacagg agcctgaggg gccacatcac ggaacacaag acactgctgg tcctcataga 420 gaatgteage tgggaggete ttgteeagga teegggagaa gatggttggg getgeteece. 480 caggagttgc ctgctgggcc ttggccactt cattcccatc agtcacacct gcagctcctc 540 ggacctgccc cccgcgcacc cccgtggccg ccacggctct gcgcgccgcg cgcaacccag 600 cagocagoac caoggotgoo godatottoo otgagoogog ggaacototo accoggota 660 geactegget cegeggeeaa cegtgggtgg ggacteeggg eneggegaac gegtgggegn 720 acgentnete acceanngth naachnnthe taaattteee nnnaaagaaa geageet 777

```
<210> 5759
<211> 6313
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(4020)
<223> similar to gil665789 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5759
gcgagcggct gttggaggaa ggaggtgggg gccgggagcg caaatggcgt tgagatggtt
                                                                      60
cagggeeetg tteaaaetee ageaetgaee atteaeegge ggaageggeg gegeaggagg
                                                                      120
cggcggcggc ccagcggggg cacacagcag gctctgttac cagctccagc agtggcggcc
                                                                      180
agcgagaget aggecegege eeggeeggeg gegetegagg eggggaggga agttgeggg
                                                                      240
eegecgetee tgecceecca acegggette etatttaceg aaagcagagt eeetegeete
                                                                      300
teteggetet cacetgeegg ceetgetete eegegegagg gtteegegee egeeegeggg
                                                                      360
ccgtaaggag cgggagaagg cggaagcggc cccgtggcca aagcacccgc caggcttccg
                                                                      420
aggagaatat gaaactggtt gtcaaaatga catccagatt tgggaaaaca tacagtagga
                                                                      480
aaggtggaaa tggcagttca aaattcgatg aagtcttttc caacaaacgg actaccctta
                                                                      540
gcacaaaatg gggagagacc acatttatgg ctaaattagg gcagaagagg cccaatttca
                                                                      600
```

```
aaccagatat ccaagaaatt ccgaagaaac ctaaagtgga agaagaaagt actggagatc
                                                                      660
cttttggatt tgatagtgat gatgagtctc taccagtttc ttcaaagaat ttagcccagg
                                                                      720
ttaagtgttc ctcttattca gaatctagtg aagctgctca gttggaagag gtcacttcag
                                                                      780
tacttgaage taatageaaa attagteatg tggteattga agacactgte gtttetgata
                                                                      840
aatgcttccc tttggaggac actttacttg ggaaagaaaa gagcacaaac cgaattgtag
                                                                      900
aagatgatgc aagcataagt agctgtaata aattaataac ttcaggtaaa gtggagaatt
                                                                      960
ttcatgaaga acatgaaaag aatagtcacc atattcacaa aaatgctgat gacagtacta
                                                                     1020
agaaacccaa tgcagaaact acagtggctt ctgaaatcaa ggaaacaaat gatacttgga
                                                                     1080
actoccagtt tgggaaaagg ccagaatcac catcagaaat atotccaatc aagggatotg
                                                                     1140
ttagaactgg tttgtttgaa tgggataatg attttgaaga tatcagatca gaagactgta
                                                                     1200
ttttaagttt ggatagtgat ccccttttgg agatgaagga tgacgatttt aaaaatcgat
                                                                     1260
tggaaaatct gaatgaagcc attgaggaag atattgtaca aagtgttctt aggccaacca
                                                                     1320
actgtaggac gtactgtagg gccaataaaa cqaaatcctc ccaaggaqca tcaaattttq
                                                                     1380
ataagetgat ggacggcace agtcaggeet tagecaaage aaacagtgaa tegagtaaag
                                                                     1440
atggcctgaa tcaggcaaag aaagggggtg taagttgtgg gaccagtttt agagggacag
                                                                     1500
ttggacggac tagagattac actgttttac atccatcttg cttgtcagtt tgtaatgtta
                                                                     1560
ccatacagga tactatggaa cgcagcatgg atgagttcac tgcatccact cctgcagatt
                                                                     1620
tgggagaagc tggtcgtctc agaaaaaagg cagatattgc aacttctaag actactacta
                                                                     1680
gatttcgacc tagtaatact aaatccaaaa aggatgttaa acttgaattt tttggttttg
                                                                     1740
aagatcatga gacaggaggt gatgaaggag gttctggaag ttctaattac aaaattaagt
                                                                     1800
attttggctt tgatgatctc agtgaaagcg aagatgatga agatgatgac tgtcaagtag
                                                                     1860
aaagaaagac aagcaaaaaa agaactaaaa cagctccatc accctccttg cagcctcccc
                                                                     1920
cagaaagcaa tgataattcc caggacagtc agtctggtac taacaatgca gaaaacttgg
                                                                     1980
attttacaga ggacttgcct ggtgtgcctg aaagtgtgaa gaagcccata aataaacaag
                                                                     2040
gagataaatc aaaggaaaat accagaaaga tttttagtgg ccccaaacgg tcacccacaa
                                                                     2100
aagetgtata taatgeeaga cattggaate atecagatte agaagaactg cetgggeeac
                                                                     2160
cagtagtaaa acctcagagt gtcacagtga ggctgtcttc aaaggaacca aatcaaaaag
                                                                     2220
atgatggagt ttttaagget eetgeaceae cateecaaag tgataaaaae tgtgacaata
                                                                     2280
cctactcage cctaccaaga tatagttact gcactgaaat gccagacgag aagaccaaga
                                                                     2340
attatatact gttgttcagc acgtgaagca cttcaacgat gttgtagaat ttggtgaaaa
                                                                     2400
tcaagagttc actgatgaca ttgagtacat gttaagtggc ttaaagagca ctcagcctct
                                                                     2460
aaacacacgt tgccttagtg ttattagctt ggctactaaa tgtgccatgc ccagttttcg
                                                                     2520
aatgcacctg agagcacatg ggatggtagc aatggtettt aaaaccttgg atgattccca
                                                                     2580
gcaccatcag aatctgtccc tctgtacage tgccctcatg tatatactga gtagagatcg
                                                                     2640
tttgaacatg gatcttgata gagctagctt agatctaatg attcgacttt tggaactgga
                                                                     2700
acaagatgct tcatcagcca agctactgaa tgaaaaagac atgaacaaaa ttaaagaaaa
                                                                     2760
aatccgaagg ctctgtgaaa ctgtacacaa caagcatctt gatctagaaa atataacgac
                                                                     2820
tgggcattta gctatggaga cattattatc ccttacttct aaacgagcag gagactggtt
                                                                     2880
taaagaagaa ctccggcttt tgggtggtct ggatcatatt gtagataaag taaaagaatg
                                                                     2940
tgtggatcat ttaagtagag atgaggatga agagaaactg gtagcctcac tatggggagc
                                                                     3000
agagagatgt ttacgagttt tagaaagtgt aactgtgcat aatcccgaaa atcaaagcta
                                                                     3060
cttgatagca tataaagatt cccaacttat tgtttcatca gctaaagcat tacagcattg
                                                                     3120
tgaagaactg attcagcagt acaaccgtgc tgaggacagc atatgcttag ctgacagtaa
                                                                     3180
gcctctgcct caccagaatg taactaacca tgtaggcaaa gcagtggagg actgcatgag
                                                                     3240
ggccatcatc ggggtgttgc ttaatttaac taatgataat gagtggggca gcaccaaaac
                                                                     3300
aggagagcag gacggtctca taggcacagc gctgaactgt gtgcttcagg ttccaaagta
                                                                     3360
cctacctcag gagcagagat ttgatattcg agtgctgggc ttaggtctgc tgataaatct
                                                                     3420
agtggagtat agtgctcgga atcggcactg tettgtcaac atggaaacat cgtgctcttt
                                                                     3480
tgattcttcc atctgtagtg gagaagggga tgatagttta aggataggtg gacaagttca
                                                                     3540
tgetgtecag getttagtge agetatteet tgagegagag egggeageee agetageaga
                                                                     3600
aagtaaaaca gatgagttga tcaaagatgc tcccaccact cagcatgata agagtggaga
                                                                     3660
gtggcaagaa acaagtggag aaatacagtg ggtgtcaact gaaaagactg atggtacaga
                                                                     3720
agagaaacat aagaaggagg äggaggatga agaacttgac ctcaataaag cccttcaqca
                                                                     3780
tgccggcaaa cacatggagg attgcattgt ggcctcctac acggcactac ttcttqqqtq
                                                                     3840
tctctgccag gaaagtccaa tcaatgtaac cactgtgcgg gaatatctgc cagaaggaga
                                                                     3900
cttttcaata atgacagaga tgctcaaaaa atttttgagt tttatgaatc tcacttgtgc
                                                                     3960
tgttggaaca actggccaga aatctatctc tagagtgatt gaatatttgg aacattgcta
                                                                     4020
```

```
getgetttae etttgettea ggtgeteggt aatgetggag etateettag acaaagaaaa
                                                                     4080
gtcaagtcat qaaagaagtc cttgaagata taccaagaac attcatcagt atcattcgtg
                                                                     4140
tttggatttt taaggccacc tgatttcttc gtcatgcatt cggcatttgc taaatgacag
                                                                     4200
ttactacatc aatctgcaac tatcaaaaat gaggggaaaa ggttcaggct gttaacaatt
                                                                     4260
ccatqcaqta tttaaataca tttactttqq caqaqtttat accctcccct tqttttcttq
                                                                     4320
ctttattctg ggcaagtttg aaggggaaaa tttgtgctgc tgttagtgca actgctgtgt
                                                                     4380
atgttgagec actgttgtca tgccagccag gtgcaaaggc agcttagcta ctgaggtagc
                                                                     4440
gaatgttetg aggacattet agacaacage ttagtteett ttteaggete atttgetttt
                                                                     4500
gcttttttgt tgaatgattc caatcgtaaa taaagctttt aataattttg tgaatttttt
                                                                     4560
ggttgttgtt ccctgaacta ctgtctatat ttaaaattag atggaatcca aagatacacg
                                                                     4620
ggattaatag tatatttttt tattettgat taggtttggg ttattgaact attttttact
                                                                     4680
tttgagacca caaccatatt caatatcata ccataatgtg tcatagctat aggcacaaga
                                                                     4740
aaaacaacag tttgagagaa tattatataa gatqatqtqc cctqttaaaa qqaqqaqqca
                                                                     4800
aaatagtcaa acccagggta gtttacactt aatgctaggg aggctcttaa aacattatta
                                                                     4860
gattttgagg aaagactctc tagatatatt ttctaatgtt cagtacaata aatataagga
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agctaaaaca ccaatgtgga attcctgttt ccagataaca tgtatattct tctatagagt
                                                                     4980
gacaggatca attgcataag cgcaaagcct taaattgctg gtttagagaa gacccttttt
                                                                     5040
tcattcagat tctttgttcg tagagcagtt atttgaaaaa cagttatgga acacaaaaca
                                                                     5100
ttttatagat ttaatatcat aacattgcaa atttttcttg tattattgtt cacaccactg
                                                                     5160
gttatacttt tttttttcct tttttattga tggggcctga atacaggctt tctagagatc
                                                                     5220
tttttcatta atacttttaa atacetttca ggtagttaca tcatgtttct tcattggatt
                                                                     5280
tgtaaaactt gaagccataa aaatattagt ttggtgtgta ttgggggaaaa tagctaaaag
                                                                     5340
tétaattttt acceatttag actttgttat tteettgtat aaagtgacaa ateggggete
                                                                     5400
ttgtatcagt gccagctgta atgtttttaa atgcagtggc tgccttctat tgtcttccta
                                                                     5460
tttttgataa tgcagattgt tgggaaatct gtaaggaagt aactgattcc aggcaaattg
                                                                     5520
ttttcttcct tctacccacc ccaaccccta cccatcacct tttaagaaca tagtacgcca
                                                                     5580
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                                                                     5640
atacttttaa aaacatattg gtaaatgata cccataaaat taaattagtt atattttatt
                                                                     5700
ttaaaatgca aaatacattg atatttatta atcattggat ttagggaaag ggacagattt
                                                                     5760
ttggtgaacc tgacttgtgg cagatggtaa ggaatattat aaaacatttg gatgagaaca
                                                                     5820
atcagggcga actgcatttt tctgttacac tggtaatcat ttgaaaattg atttacctca
                                                                     5880
gtgtttaaca gttttttgtt ttgttttgtt ttttaaataa taactaattg tcgagcactg
                                                                     5940
atagagatgc agattttggt ggggggaggt ggtgggggag ataatcactt caccaactgc
                                                                     6000
agtgcatttg tgtgttttta accetcagag aactetgcat tttagggtac ttgaggetga
                                                                     6060
cttaactaaa agttttaaag taaccttttt tccattgtaa atatttctgt aaatactacc
                                                                     6120
aattggaaat tagaacagta gagtactttt ctgaatccaa tcctattttt attttataca
                                                                     6180
gtatttetea getgtgatet ttggageaaa ageeaaegge aggaaaaaat agtttgtaee
                                                                     6240
agtttcatga agtatgtctt tgggtttttg taaataattt taactcaaat aaaattgcta
                                                                     6300
ctttcaatac aaa
                                                                     6313
```

```
<210> 5760
<211> 3206
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2300)...(924)
<223> similar to gi5419890 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5760 60 tttttttcc taggcaactg ttggcccaaa aaaaaaattt attttccttt caaataaaat gtacaaccaa aatttagggt ttggagcagt agggaagaca ggagatacca gggagcccat 120 tttacagtag agatotgcat otgaccootc tatoccatac otttgcaaag gaagggaggg 180 gtctacaagc cagaactttc agaagagaag aaaatacatg ctgtgctggt gctgtttctg 240 gagcaggtca tcctttaggt atagaacacc acctccaccc gatgacatca gaaccactga 300 ctggtagage ccttggaaat catacagtee acceatecee egecagaeac atggaeacae 360 cgaggctcag atggggaagg gtacataccc tagggcacac accaaatcaa aaaggtgaag 420 tcaggactag aacacctgag caactttagc aggggactgt ggccacaggc ctggatgtgc 480 acagtagate atgaaataca ttagteetag tgaatgacee eegtgeagag aaatggettg 540 tggttgtcag ggagcagcca cttgcctcag gggctccctg accctcagtg aaaggtgact 600 gtgtaaaggc caaaaactgg atggtggtca tgaacctcag gacgtttttt ttttttagca 660 ccaaatggtg gagetetetg ccageteage ttettgggge eteteaggta aaggtgatgt 720 ttgaggaccc cacgcccata tgaggggtgg agagaagcca gcagcactgg ggtgagcctt 780 ggcctacacc cttccttctt accettcccc catettcagt aaggccaaga gaggatgtgg 840 ggtggggaag gccagaatgg tategtgttt cttgtttctg ggcagtgggc tgcgtcctcc 900 caagcaggac tgaagggttc agaatcgctt ttcctcaggc tgagaggtta tgagcagctc 960 🕟 cttgttcccg aagtcccacc aggccgtcat gtggaacgcc atgttggtta agacaacagt 1020 gtactccagg atggcaaaga tggtgtacac tccagcctca caatacatgt tgtgccgaaa 1080 gtagacagec agegeegaga agaaggagat gaagttgatg atgaagagee getgttteea 1140 gctgtaggac ttgcgatcct agggaatggg cfgtctgatc actctgcagc ttgctgggta 1200 tgagagegtg ggeteeeete teageeetaa eteetaaggg etgggeetta teteeettgg 1260 ctcccactag cggtcatgga agggagcaca ggcaggggca gcaagaatga cgactatgtg 1320 ttcacgtccc tgcctctggg ggagtgatgg gccgaggagc agtggtattc ctgccgcttc 1380 cacttcaggg ggatggagta tgaaagttac atggagtcac ccaccaaccc cacctccaaa 1440 tactgtgggg gaaaagaaac ccatgtacat gggtggggcg ctggaattat gacagaccag 1500 tectotgaca etgitectaa etcactgoog cotagatgog actecteatt etatocceat 1560 ttgcagcete catetettet attetecagt eteccacaet acceaaacae agtgetatag 1620 tectagatte tgaccaacca cecteagttt gtteceaage eecageeca acceeageae 1680 coctotgoca gggttcccat tagaactcag ttcccacctc accattaccc gaatcctgag 1740 gacagatgtc cttgattttc ttctgggctg ccttggagcc cccgctaggg atagaccgta 1800 ceteetgact tactgtgtge ttettggtea accgecagag aatgeaggtg aggageatgt 1860 gcccgaggga tgaggcaatg aacacaatga aagcattttc gtggatggct ggagggaaag 1920 aggattggga gccacattgc agggagtgcc cacaccacga agtaggaagg tccgaatgtg 1980 gtaggggcag geoegteece teagggaaca ettececaet eetceteat eeaggeacee 2040 actgaagtcc tcggaggagg agacataagt gagcactagc aacgcgaggt tctccacgac 2100 attgaggccg aagttgaggc ggcagagcgg gcgatagcag gaacacgggg aggtgcagct 2160 gaggtagtgg ttccagtagg cgaaggccac caagaagcga ggcgccgagt gcaggccgat 2220 gcagaaacgc cacacgtagc gctggggcac ctccccgccg atggctgagc tcaccgaggg 2280 cagginating ggcacciaga gagingingac cigintingge atotyconomic gecageocog 2340 eccatgtgga gaacettete tecatetgae aaaateaete ttgeetetge tecageeeet 2400 eccettecaa gaagteetee tteagatgte eccatacete teecaaaaga ecteteette 2460 caggioctag goccaaagig ciggaticto attocccago tatcciggga titgigcago 2520 agcatggtgg caccttctcc atctcccccg cagactggaa cctgcctgtg tttggtcaat 2580 gtgtagatgg gttcagatgc tettcaceca tagetcagag etgtgeetee aetaagaeee 2640. . tgggtgagtt ccaaggcctc agattcagtc cagaggacag ggatgagtca cagaccatct 2700 2760 gagetteett agaacagtge tggatteaet geteagetaa gatgtteete agtetgetee cagegocact cactecteta ggcaggtgtg ccaaggtggt agaatggcac cectgetetg 2820 atcatgatta acaaagtggg tgggctgggc acgatggctc acatctgtaa tcccagcaag 2880 aatatggatt tttaaaagtt tccaaaactg tggaaatggc cagtccattg cccacacttt 2940 ctgtgcactt ctgcagacct ccaacgaggg ccagcgcagt gccagagccc agcaacccag 3000 caagggaatg aatttgetet aactatggag ggacagtett eggaagtgga gttettaagg 3060 accatcattc ctttcttca atgagatgcc agactgctga gaaggtgagc aatgctgcag 3120 gcggctcata gggcagccca caggtaggcc tggggcaaga ctagccatgg ggcttcacag 3180

3206

cctccacaaa aaaggagatg gattcc

```
<210> 5761
<211> 4441
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (60)...(3466)
<223> similar to gil502311 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5761 ttttttttt ttgccgccca ctcagacttt attcaaagac cacgggcgac cggagcgcga 60 tggcgggggc ggcgggactc acggcagaag tgagctggaa ggtcttggag cgaagagctc 120 ggaccaagcg ctcagtttta aaattgctat agcttagcct gcgacgctta tgattagagc 180 caacaatttg aaatggcctg ctcacctgat gcagtcgtct ctccgtcttc cgctttctta 240 aggtctggct cagtttatga acctcttaaa agcattaatc ttccaagacc tgataatgaa 300 actetetggg ataagttgga ecattattae agaattgtea agteaacatt getgetgtat 360 caaagtccaa ctaccggtct ctttcccact aaaacatgcg gtggtgacca gaaggccaag 420 atccaggaca geetatactg egetgetggg geetgggett tggetettge atacaggega 480 attgatgatg acaagggaag gacccatgag ctggagcact cagctataaa atgcatgaga 540 ggaattetet actgetatat gegteaggee gataaggtee ageagtttaa geaggateea 600 egeceaacaa catgtettea etetgtttte aatgtgeata caggagatga gttgetttee 660 tatgaggaat atggtcatct tcagataaat gcagtgtcac tttatctcct ttaccttgtg 720 gaaatgattt cctcaggact ccagattatc tacaacactg atgaggtctc ttttattcaa 780 aacettgtat tttgtgtggg aaagagttta cegtgtgece tgaetttggg tgtetgggga 840 aagagggaag gcaaatatta ttaatgggca gcacagagct acattcgagc tcggttggtt 900 taggcaaaag gcagctctag aagcaattta atggattcaa cctttttggc aaccagggct 960 gttcgtggtc agttatattt gtggatctcg atgctcacaa tcgcaacagg caaactttgt 1020 getegetgtt acceagagaa teaagateae ataatacaga tgetgeeetg eteceetgea 1080 tragttator tgratttger rtggatgatg aagttetttt tagreagara ettgataaag 1140 tggttagaaa attaaaagga aaatatggat ttaaacgttt cttgagagat gggtatagaa 1200 catcattgga agatcccaac agatgctact acaagccagc tgaaattaag ctatttgatg 1260 gcattgaatg tgaatttccc atatttttcc tttatatgat gattgatgga gtttttagag 1320 geaatectaa geaagtacag gaatateagg atettttgae teeagtaett cateatacea 1380 cagaaggata tcctgttgta ccaaagtact attatgtgcc agctgacttt gtagaatatg 1440 aaaaaaataa ccctggtagt caaaaacgat ttcctagcaa ctgtggccgt gatggaaaac 1500 tgtttctttg gggacaagca ctttatatca tcgcaaaact cctggctgat gaacttatta 1560 gtcctaaaga cattgatcct gtccagcgct atgtcccact aaaggatcaa cgtaacgtga 1620 gcatgaggtt ttccaatcag ggcccactgg aaaatgactt ggtagttcat gtggcactta 1680 tagcagaaag ccaaagactt caagtttttc tgaacacata tggtattcaa actcaaactc 1740 ctcaacaagt agaacccatt cagatatggc ctcagcagga gcttgtgaaa gcttatttgc 1800 agctgggtat caatgaaaag ttaggactct ctggaaggcc agacaggccc attggctgcc 1860 tegggacate aaagatttat egeattetag gaaagaetgt ggtttgttae eegattattt 1920 tcgacctaag tgatttctac atgtctcagg atgttttcct gctgatagat gacataaaga 1980 atgogotgoa gttoattaaa caatattgga aaatgoatgg acgtocactt ttoottgtto 2040 tcatccggga agacaatata agaggtagcc ggttcaaccc catattagat atgctggcag 2100 cccttaaaaa aggaataatt ggaggagtca aagttcatgt ggatcqtcta caqacactaa 2160 tatctggagc tgtggtagaa caacttgatt tcctacgaat cagtgacaca gaagagcttc 2220 cagaatttaa gagttttgag gaactagaac ctcccaaaca ttcaaaagtc aaacggcaaa 2280

```
gcagcacccc tagtgctcct gaactgggac agcagccgga tgtcaacatt agtgaatgga
                                                                     2340
aggacaaacc cacccacgaa attetteaaa aactgaatga ttgeagttgt etggetagee
                                                                     2400
aagccatcct gctgggtata ctgctcaaaa gagaaggccc caacttcatc acaaaggaag
                                                                     2460
gtaccgtttc tgatcacatt gagagagtct atagaagagc tggcagccaa aaactttggt
                                                                     2520
eggttgtacg cegtgeagea agtettttaa gtaaagtagt ggacageetg geeceateca
                                                                     2580
ttactaatgt tttagtgcag ggcaaacagg taactctggg tgcctttggg catgaagaag
                                                                     2640
aagttatctc taatcctttg tctccaagag tgattcaaaa catcatctat tataagtgta
                                                                     2700
acacccatga tgagagggaa gcggtcattc agcaagaact ggtcatccat attggctgga
                                                                     2760
teatetecaa taaccetgag ttatteagtg geacgetgaa aatacgaate gggtggatea
                                                                     2820
tecatgecat ggagtatgaa etteagatee gtggeggaga caagecagee ttggaettgt
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atcagetgte acctagtgaa gttaaacage ttetgetgga tattetgeag ceteaacaga
                                                                     2940
atggaagatg ttggctgaac aggcgtcaga tcgatgggtc tttgaataga actcccaccg
                                                                     3000
ggttetatga cegagtgtgg cagattetgg agegeaegee caatgggate attgttqetq
                                                                     3060
ggaagcattt gcctcagcaa ccaaccctgt cagatatgac catgtatgag atgaatttct
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                                                                     3180
ctctccttgt tgaagacacg ttgggaaata ttgaccagcc acagtacaga cagatcgttg
tagagttact tatggttgta tccattgtac tggaaagaaa ccccgagcta gaatttcaag
                                                                     3240
acaaagtaga totagacaga otggtcaaag aagcatttaa tgaatttcaa aaagatcaga
                                                                     3300
gteggetaaa ggaaattgaa aaacaagatg acatgactte ettttacaac acteeteece
                                                                     3360
tgggaaaaag aggaacatgc agctatttga caaaggcggt gatgaatctg ctgctggaag
                                                                     3420
gagaagtcaa gccaaacaat gatgacccgt gtctgattag ctagtgggga aggtgtagga
                                                                     3480 .
agetetgttg agacacatgt tetgaagtgt gttgtgttte atgtteaage ttaateaagg
                                                                     3540
cagccattaa tatacgaact gagcatgctg gggaggtgaa tgccacatcc ttggcggggt
                                                                     3600
tatggacctc ttgcatgtca tagccaatct aacggtaatg gtaaatgctt ttaatcaaqc
                                                                     3660
aggaaaaagt totcatgatt atgccaacta taatagtaat cotcactgag tgataaaaaat
                                                                     3720
agtttatgaa ttgaaaattt gccgctgcat gttgtatgat caaatagttc atcaaaatga
                                                                     3780
atctttgctc tttggactga attcttacca tactgccatt aaaataaatt tgccaactag
                                                                     3840
taatgcatac tggaaatcaa aagatactga aagaatggtg aacttctctt agtggtattg
                                                                     3900
tcatgctaaa agatgttaat atacatcata aaagcaaagt cagccagctg atattttggt
                                                                     3960
totcaaaaac tgcattatta ataatatttt agtatacaga gctattctac agtttttaca
                                                                     4020
ttgtaaacat gactgtggtt ttgtatttgc taaatatagg ggttggacta aaatataata
                                                                     4080
aatotgtaco ttatoaaaca ttttotttga gotootgota aaaataggac atgtotatga
                                                                    · 4140
ttgttcaaaa atatgttaaa tttaggctca gcacagtagc tcacacctga aatcttagca
                                                                     4200
ettegggagg etgaggeagg tggateaett gaggttagga gtteaagace ageedageea
                                                                     4260
acatggtgaa aaccctgtct ctactaaaaa tacaaaaatt agccaggcat gatggtgcat
                                                                     4320
gcctttaaac ccagctactg aggaggctga ggcatgagaa ttgcttgaac caggagacgg
                                                                     4380
aggttgcagt gagctgaaat cctgccactg cacaccagec tgggtgacag agcgagactc
                                                                     4440
                                                                     4441
```

```
<210> 5762
<211> 1105
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1106)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (185)...(666)
<223> similar to gi30168 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5762
cctgggaatt cttagaaatt tctgaaataa taagttatcc ttttaaaaaa aaaaactttt
                                                                       60
attttaggtt cagggataca tgtataggtt tgttataaag ataaactcgt gttattctga
                                                                      120
aaagacttcc atttgcagac atcgctgctg cccagaactc cctgccaccc agccatggcc
                                                                      180
aacccccact gtgttcttca acattgcaat tgatagtgag tccttgggct gcatcttcct
                                                                      240
tcaagctatt tgcagacaaa gttctaaaag atggaagaaa aattttgtgc ttctgaacac
                                                                      300
tggagagaaa gtattgggtg ataaaggtcc ctgcttttac agaattattc cggggtgtgt
                                                                      360
gtcagggtgg tgacttcaca caccataatg gcactggtgg caagtccctc tacagcaagg
                                                                      420
aatttgatga tgagaacttc atcctaagca tacagctcct ggcgtcttgt ccacggcaaa
                                                                      480
tgctggaccc accacaatg gttcccagtt tttcatctgt actgccaaga cagaggatgg
                                                                      540
atgacagcat gtggtctttg gcaaggtgaa agatggcatg agtattgtgg aagccctgga
                                                                      600
acgetetggg tecaggaatg gtaagaecag caagaagate acagetgeta actgtggaca
                                                                      660
actetaataa attigatigi titatetgaa eeaceagate giteetieta tageteagga
                                                                      720
aagcatgett ecaceceatt tgeteacage atectataat etttgeacag teetttgggt,
                                                                      780
tocatatttt cottatocto ttocatgtot agotggatog cagagttaag tttataatta
                                                                      840
caaaatgaaa actaagtaac aagaagaaaa taaaagactt ccagcaattt ttatactctt
                                                                      900
tagtcattac tgtggatatc taaaagaaat tggtttaata aataagaaat attacattta
                                                                      960
gcaaatttat aaacaactat agcctgagat tnngggngnt caaactttag aaaataccag
                                                                     1020
tgaacatttt tgggtaatat tcaaagaatg tgacattcag atctcntggn ttccncgacg
                                                                     1080
gttactcagg tctctaangg gacct
                                                                     1105
```

```
<210> 5763
<211> 1731
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1710)...(814)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5763
atattgatct cctggagatt cgaaatggac caagatccca tgaatcattc caagaaatgg
                                                                       60
atcttaatga tgactggaaa ctctctaaag atgaggttaa agcatattta aagaaggagt
                                                                      120
ttgaaaaaca tggtgcggtg gtgaatgaaa gtcatcatga tgctttggtg gaggatattt
                                                                      180
ttgataaaga agatgaagac aaagatgggt ttatatctgc cagagaattt acatataaac
                                                                      240
acgatgagtt atagagatac atctaccett ttaatatage acteatettt caagagaggg
                                                                      300
cagtcatctt taaagaacat tttattttta tacaatgttc tttcttgctt tgtttttat
                                                                      360
ttttatatat tttttctgac tcctatttaa agaacccctt aggtttctaa gtacccattt
                                                                      420
ctttctgata agttattggg aagaaaaagc taattggtct ttgaatagaa gacttctgga
                                                                      480
caatttttca ctttcacaga tatgaagett tgttttaett teteaettat aaatttaaaa
                                                                      540
tgttgcaact gggaatatac cacgacatga gaccaggtta tagcacaaat tagcacccta
                                                                      600
tatttctgct tccctctatt ttctccaagt tagaggtcaa catttgaaaa gccttttgca
                                                                      660
atagcccaag gcttgctatt ttcatgttat aatgaaatag tttatgtgta actggctctg
                                                                      720
agtetetget tgaggaccag aggaaaatgg ttgttggace tgacttgtta atggetactg
                                                                      780
```

```
ctttactaag gagatgtgca atgctgaagt tagaaacaag gttaatagcc aggcatggtg
                                                                      840
gctcatgcct gtaatcccag cactttggga ggctgaggcg ggcggatcac ctgaggttgg
                                                                      900
gagttcgaga ccagcctgac caacacggag aaaccctatc tctactaaaa atacaaaagt
                                                                      960
ageegggegt ggtgatgegt geetgtaate eeagetacee aggaaggetg aggeggeaga
                                                                     1020
ateacttgaa cccggaggcg gaggttgcgg taagccgaga tcacctccag cctggacact
                                                                     1080
ctgtctcgaa aaaaagaaaa gaaacacggt taataacata taaatatgta tgcattgaga
                                                                     1140
catgctacct aggacttaag ctgatgaagc ttggctccta gtgattggtg gcctattatg
                                                                     1200
ataaatagac caaatcattt atgtgtgagt ttctttgtaa taaaatgtat caatatgtta
                                                                     1260
tagatgaggt agaaagttat atttatattc aatatttact tettaagget ageggaatat
                                                                     1320
ccttcctggt tctttaatgg gtagtctata gtatattata ctacaataac attgtatcat
                                                                     1380
aagataaagt agtaaaccag tctacatttt cccatttctg tctcatcaaa aactgaagtt
                                                                     1440
agctgggtgt ggtggctcat gcctgtaatc ccagcacttt gggggccaag gagggtggat
                                                                     1500
cacttgagat caggagttca agaccagect ggecaacatg gtgaaacett gtetetaeta
                                                                     1560
aaaatacaaa aattagccag gcgtggtggt gcacacctgt agtcccagct actcgggagg
                                                                     1620
ctgagacagg agatttgctt gaacccggga ggcggaggtt gcagtgagcc aagattgtgc
                                                                     1680
cactgcactc cagcctgggt gacagagcaa gactccatct caaaaaaaa a
                                                                     1731
```

```
<210> 5764
<211> 1482
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1421)...(943)
<223> similar to gil246757 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5764
actacagcag tacataaagt tttattaata ttctgattct cgtgtcatag cttttatggc
                                                                       60
aggaaaggat gaggacatgc cccacctgta acgtagagca agcaaaccac caagtagaat
                                                                      120
cttgagattc teteteaact gttetetaga aacaegettg tgettttaat etgeetttta
                                                                      180
aaagggacac agaacaaaaa atggttgttt gcaaataaac atctgaaaga aagtaacagc
                                                                      240
tgacctgggc tgaggcatcc aaacaaagca gtcattgtgg aaggagacaa tgcaaaccac
                                                                      300
actggggcaa gaaacggggc agagaacgtg cggtcatttg tgcgttgggt atttctacca
                                                                      360
gccccaaagg ccccatctgg aacaagtatc aaccaggagg ggctctatgg cttqatttat
                                                                      420
taacctaact caaaagaagt cactgccacc aacagcactg tgcagtttta ttaaccattc
                                                                      480
aagtccagta gcatctggta agattgggac agaattggga ttgaaaagtg aacagatatt
                                                                      540
cagcatctaa cagttcaaaa gaagccacta catactettt tcacaaatat gttttcacag
                                                                      600
agccaataca gtactagcca ttaacccagt acaccaagtg tactgaagta gaaaagatgc
                                                                      660
aacaagaaaa atagctacat tagaaagacc aacactttag aaaaagagta aaacactttc
                                                                      720
agtttcttcc ccttttagcc cccctaaaaa caaacatttt tacagtcctg gatcctggga
                                                                      780
tettacettt tacagteeta cattaggett tettaaaata tttgteeagg agggggaaaa
                                                                      840
aataaaattg gccactgggc caggtaccag tetttgggat atttaggaag gggggatggg
                                                                      900
gaagaaagtc aagttcctca gaaacaaatt agtcaggctt caggtctcgt cgcggacagg
                                                                      960
gtetttggga tteettggtt etteeggaae ttetteaatg tgettaacce tteeteeteg
                                                                     1020
caaaagttcc caatttggca acccatttgt gccctctcgg gttcctcctt taattagctt
                                                                     1080
ccgattttgt gggtgaagtt ttctcttctg cccattttta ctgaagttgt ttgttctctt
                                                                     1140
ctaattgcct ttctgcaagc acttctttct tcggtgcctc tcggtttctc agccagctgc
                                                                     1200
etteaagace teaagettea tggggaettg egtetttett etggeagett eetaattete
                                                                     1260
```

```
tcggaatttc cccccgggga agaacccttc ttctttgggg gggagaggg ggaattctgg 1320
aacaaattcc tttgcccgag gggctgagaa tcaggctcaa aagcctggcc tgaggcacgc 1380
ttctccagtt ctttcacctg gatatcagaa gaagccatgg tgaatagaag acaagcgaca 1440
gggcagtgta ttctgcacaa tcaactggga taaggaaagt cc 1482
```

```
<210> 5765
<211> 5716
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (218)...(4657)
<223> similar to gi406225 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5765 tgegacegee acceettée degetgécag cacteaceet eteteogete etgetegeaa 60 cetegeggtt cetggggtge ttgtgeecae tgtgtggaea gegegggegg aettttggge 120 eggggegtgg egtgeggggg aggeteteta aggeeteege etetgeetet eeegeeeeet 180 tacccgcccc ggagacgaca gcgtcggagg ctccgccatg gcctcgggag ccggaggagt 240 cggaggggc ggtggcggca agatccggac gcggcgttgc caccaggggc caattaaqcc 300 ttaccagcag gggcgacaac agcatcaggg cattettagc agggttacag aatetgttaa 360 gaatattgtg ccagggtggc tacaaagata cttcaacaag aatgaagatg tatgcagctg 420 ttcaacagac acaagcgagg ttccacgctg gccagaaaat aaagaggacc atctggtata 480 tgccgatgag gagageteta atattaetga tgggagaate acaeetgage cageagteag 540 taatacagaa gaaccttcaa caactagtac tgcttcaacc ttatccagat gtgttaacaa 600 gggtttetet ttateggage catetgaatt ttteeatgtt ggaateeest geattacaet 660 gtcagccatc tacatcctcg gcattcccaa ttggcagttc gggattttcc cttgtaaagg 720 aaattaaaga ttotacotot cagcatgatg atgataacat otcaactaco agtggttttt 780 cttcaagagc ttctgataaa gatataactg tttcaaagaa cacttcattg ccacctctgt 840 ggtccccaga agctgaacgt tctcactcac tctcacagca cactgccacc agctcaaaaa 900 aaccagcatt caacttgtct gcctttggaa cactttcccc ttcacttggg aattcttcaa 960 tecttaaaac cagteagett ggagattete etttttatee tggaaaaaca acatacqqtq 1020 gggcagcagc tgctgtaaga cagtctaaac tacgaaatac accttatcag gcaccagtta 1080 gaagacaaat gaaagctaag caactcagtg cacaatctta cggtgtgacc agttcaacag 1140 ctcggcgaat attgcagtct ttagagaaga tgtcaagccc tttagcggat gcaaaaagaa 1200 ttccatccat tgtttcttct cctctgaatt ctcctcttga taggagtggg atagatatca 1260 cagattttca ggccaaaaga gaaaaggtgg attctcaata tcctcctgtt cagagactta 1320 tgaccccaaa gccagtttcc atagcaacaa atcgaagtgt ttattttaaa ccatctctga 1380 ctccttctgg tgaattcagg aagactaatc aaagaataga taagaagtgc agtactggat 1440 atgaaaaaa tatgacaccc ggacaaaata gagaacaacg agaaagtggc ttttcatatc 1500 caaatttcag tttgcctgca gccaatggtt tatcttctgg agtaggtggt ggaggtggca 1560 agatgagacg agaaagacac gcctttgttg cttctaaacc tctggaggag gaggaaatgg 1620 aaggtccagt attaccgaaa atctctctac cgatcaccag ttcttcactg cctaccttta 1680 attitagite ceetgagate acaacticet etecateace cateaatteg teteaageat 1740 taacaaacaa ggtacaaatg acctctccga gcagcactgg cagtcccatg tttaaatttt 1800 catctccaat cgtaaaatct actgaggcaa atgtactacc tccatcatct attggattta 1860 catttagtgt gcctgttgca aaaacagcag aactttctgg ttctagtagt actttagaac 1920 caattataag tagttcagct catcatgtca ctacagtgaa cagtacaaat tgtaagaaga 1980

```
2040
 caccacctga agattgtgag ggtcctttta gacctgcaga aatcctgaaa gaaggaagtg
 ttctagatat tctgaaaagc cctggtttcg catcgccgaa gatagattct gttgctgctc
                                                                      2100
                                                                      2160
 agcccaccgc aacaagccca gtagtttata caagaccagc aataagtagc ttttcttcta
 gtggaattgg gtttggggag agtttaaaag ctgggtcatc atggcagtgt gatacatgtc
                                                                      2220
                                                                      2280
 tactccagaa caaagttaca gacaacaaat qcatagcctg tcaagcagca aaattgtcac
                                                                      2340
 ccagagatac tgctaaacag actggaattg aaacaccaaa taaaagtggc aaaacaactc
 tttctgcatc agggacaggc tttggagaca aatttaaacc agtgataggc acttgggatt
                                                                      2400
 gtgatacctg tttagtgcaa aataaacctg aagcaataaa atgtgtagcc tgtgaaacac
                                                                      2460
 cgaaacctgg aacttgtgtg aagcgagccc ttacattgac agtggtttcg gaaagtgctg
                                                                      2520
 agactatgac tgcttcatct tccagctgca ctgtaaccac tggtacctta ggatttggag
                                                                      2580
 ataaattcaa aaggcccatt ggatcttggg agtgttcagt atgctgtgtt tctaataatg
                                                                      2640
 cagaagacaa taagtgtgtg teetgtatgt etgagaaace aggaagttea gtacetaett
                                                                      2700
 caagtagcag cactgtacct gtctctctgc cttctggagg ctctctagga ttggaaaagt
                                                                      2760
 tcaagaaacc cgagggaatc tgggactgtg aattgtgcct agtgcagaat aaggcagact
                                                                      2820
 ctaccaaatg tttggcatgt gaaagtgcaa aqccaggcac aaaatctggg tttaaaggct
                                                                      2880
 ttgacacate tteeteatet tegaaeteag eageeteete ateetteaaa tttggtgtet
                                                                      2940
 catcatecte ttetgggeet teteagaett taacaageae tggaaattit aaatttggag
                                                                      3000
 atcagggagg attcaaaata ggtgtgtcat ctgattctgg gtatataaac cccatgagtg
                                                                      3060
 aaggotttta attttotaaa cacatagtag gttttaaatt tggagtttoa totgaatota
                                                                      3120
 agcctgaaga agttaaaaaa gatagtaaga atgataattt taagtttgga ctttcttttg
                                                                      3180
 gtttaagcaa cccagttttt ttaactccat tccaatttgg ggtatctaat cttggacagg
                                                                      3240
 aagaaaagaa agaggaattg ctcaaatctt catgtgcagg ttttaggttt ggtacaggtg
                                                                      3300
ttattaactc caccegtgtt cctgctaaca ccatagtgac ttctgagaac aagagcagct
                                                                      3360
 tcaaccttgg aaccatagaa accaagagtg tttcagtggc tcctttaaaa tgtcagacat
                                                                      3420
 ctgaagetaa aaaagaagaa atgeetgeea eeaaaggagg attetettt ggeaaegtgg
                                                                      3480
 agectgeete tetgecatet geeteagtgt ttgttttggg aaggacagaa gagaaacage
                                                                      3540
aagageetgt cacttetact teectagttt ttggggaagg aaagetgaca atgaaggage
                                                                      3600
 caaagtgttc aaccagtgtt ttcctttggg gaatttcaga ggcaaaccaa agatgagaat
                                                                      3660
 tetteaaagt eeacatttag tittagtatg acaaaaceat eigagaagga ateigaacag
                                                                      3720
 ccagcaaaag ccacttttgc ctttggagct caaactaata ctacagctga tcaaggtgca'
                                                                      3780
 gcaaagccag atcttagtta cttgaacaac agttcctcta gttcaagtac accagccact
                                                                      3840
 totgotggtg gtgggcatat ttggtagttc cacctottcc tccaatccac ctgtggctac
                                                                      3900
 ctttgtgttt ggacagtcca gcaatcctgg gagcagctct ggcctttggt aacactgctg
                                                                      3960
 aatccagcac ctctcagtct ttgctatttt ctcaagatag caaactagca accacatcca
                                                                      4020
 gcacaggtac agctgtcacc ccatttgtct ttggtccagg agccagcagt aataatacta
                                                                      4080
 ccacctctgg tttcggcttt ggagccacaa ccacatctag ctctgcagga tcctcctttg
                                                                      4140
 tatttggaac tggaccctca gcaccatctg ccagtccagc atttggtgct aaccagaccc
                                                                      4200
 caacatttgg acaaagtcaa ggtgccagcc agcccaatcc cccaggcttt ggatctatat
                                                                      4260
 catettecae ageattattt cecaetggtt etcageetge accaeetaet tttgggåcag
                                                                      4320
 tgtcaagcag tagccagccc cctgtgtttg gacagcaacc tagtcagtct gcatttggct
                                                                      4380
 ctggaacaac tectaattet agtteggett tecagtttgg cageageact acaaatttea
                                                                      4440
 acttcacaaa caacagtcca tcaggagtgt tcacatttgg tgcaaattct agcacacctg
                                                                      4500
 cagceteage ecageettea ggeteggggg gettteeatt taaccagtet ecageageat
                                                                      4560
 ttacagtggg gtcaaatggg aaaaatgtgt tetettette tggaacttea ttetetqqte
                                                                      4620
 gcaagataaa gactgctgtt agacgcagga aataaaggtc acattggtgt tgtactcaat
                                                                      4680
 tttaacaaca gctggtgccc tgctttcaga tactggattg tactttgtgc tggggttatc
                                                                      4740
 tgaagtcaga tetgeetaag gaettettta attttggaat ttteeteett tetetttegt
                                                                      4800
 tacagaagee ecaceetgee teaceeacee ttttttaaat aaataaatag etagaetggt
                                                                      4860
 gactgattct tcagcaaaaa tattttatga tccagcagat tattcactga tttgacatag
                                                                      4920
 tetggetgta eccaggaatg gageetgeac ggtgaatgge tttgtataga acctetttgt
                                                                      4980
 ctacaccatt atgtgcgctg ataagcgttc atggaacgcg ttgaaattgt aattatatct
                                                                      5040.
 gaggaattet gtatagatta gaattetgta tagattagag agtgttgaaa eggatgattt
                                                                      5100
 ctatgctgag tttgtgctgg tgtatgtgtg aagtgagtga gttgggtgta ttgtgcgcta
                                                                      5160
 aacttttctg atagaggaag cctgattaaa gaatggtccg tgctaaggac ttgttagatc
                                                                      5220
 tagttcactc tccatttaat aattatatgc tatttctata ttttcattct cctatcacct
                                                                      5280
 gtcttgcctt tttcattatt ttattatgaa acttgtgtaa atacaatttt gtttctgtac
                                                                      5340
 tttttggcat aacataaatc tgtgaacttg aaatttgaat tttgtgttag agatttttt
                                                                      5400
```

```
gttgtttgtt tagtcttgtc tcagatttta ttatgtaaat cccattattc aaagttgcct 5460 aaatccattt ggaaatcttt aaaaaaaaa ttggggattc ttaaagttga atttattggc 5520 ttttctgatc cagttttgtt tggaccaaaa accagtattg tacaaagtat taagcatata 5580 tttttatatt tactaaaatg gactgtggtg actttggata ataaggaaaa gtttaatatt 5640 aaagccatgt ttattacagt ataattaaca tgttaaacca tgggataaat gccatcaata 5700 aaaattatta tgacat
```

```
<210> 5766
<211> 2351
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(1498)
<223> similar to gi456257 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5766 ccggggcgga tggctccggc cgcctggctc cgcagcgcgg ccgcgcgcgc cctcctgccc 60 cegatgetge tgetgetget ceageegeeg cegetgetgg ceegggetet geegeeggae 120 gtecaccace tecatgeega gaggagggg ceacageeet ggeatgeage eetgeecagt 180 ageceggeae etgeceetge caegeaggaa geceeegge etgecageag eeteaggeet 240 eccegetgtg gegtgeeega eccatetgat gggetgagtg eccgeaaceg acagaagagg 300 ttegtgettt etggegggeg etgggagaag aeggaeetea eetaeaggat eetteggtte 360 ccatggcagt tggtgcagga gcaggtgcgg cagacgatgg cagaggccct aaaggtatgg 420 agegatgiga egecaeteae etttaetgag gigeaegagg geegigeiga ealeaigate 480 gacttegeea ggtactggea tggggaegae etgeegtttg atgggeetgg gggeateetg 540 geceatgeet tetteeceaa gaeteacega gaaggggatg tecaettega etatgatgag 600 acctggacta tcggggatga ccagggcaca gacctgctgc aggtggcagc ccatgaattt 660 ggccacgtgc tggggctgca gcacacaaca gcagccaagg ccctgatgtc cgccttctac 720 acettteget acceaetgag teteageeca gatgaetgea ggggegttea acacetatat 780 ggccagccct ggcccactgt cacctccagg accccagccc tgggccccca ggctgggata 840 gacaccaatg agattgcacc gctggagcca gacgccccgc cagatgcctg tgaggcctcc 900 tttgacgcgg tctccaccat ccgaggcgag ctctttttct tcaaagcgqq ctttqtqq 960 cgcctccgtg ggggccagct gcagcccggc tacccagcat tggcctctcg ccactggcag 1020 ggactgeeëa geeetgtgga egetgeette gaggatgeee agggeeacat ttggttette 1080 caaggtgctc agtactgggt gtacgacggt gaaaagccag tcctggggcc ccgcacccc 1140 teacegaget gggeetgggt gaggttteee ggteeatggt tgeetttggt ettggggtte 1200 ccgagaaaga aacaagattc taacttcttc ccgaggcagg gtactactgg cgtttccacc 1260 ccagcacccg gcgtgtagac agtcctccgc tcccgcaggg ccactggact gggagagggg 1320 tgccctcttg agattcgacg gttgccttcc caggatgctg atggctatgc ctacttcctg 1380 cgcggccgcc tctacttgga agtttgaccc tgtgaaggtg aaggctctgg aaggcttccc 1440 cogtotogtg ggtoctgact totttggdtg tgccgagdct gccaacactt tcctctgacc 1500 atggcttgga tgccctcagg ggtgctgacc cctgccaggc cacgaatatc aggctagaga 1560 cccatggcca tctttgtggc tgtgggcacc aggcatggga ctgagcccat gtctcctcag 1620 ggggatgggg tggggtacaa ccaccatgac aactgccggg agggccacgc aggtcgttgg 1680 ttcaccttgc cagcgacttg tctcagactt gggcaaggga ggcttttggc atgacttaag 1740 agggaagggc aatcttttgg gcccgcttat gcaggtcctt gggcaaaacc tgggcttgcc 1800 ctgtcttcca ttccctgttc ccttaagggt aaggcaccca ttgggcagga actgggggaa 1860

```
acttggagtg teetttgetg ttatecettg tttttgaggt teeetteeca gggggetgge
                                                                     1920
aactgaaagc aaagggtgct gggggccccc aatggccttt cagcccctgg cctgagcaaa
                                                                     1980
ctggggcttg taagggcaag ggccaacttc cctgaaggtc aaggtccttg ggtaaggtgc
                                                                     2040
cctgcactct gtcctgcctt tctgggctga acaatccctg gaaaatctgt tctcccagaa
                                                                     2100
tececaggee aaaaagttea eagteeaaat ggtgaagggg tattetteat geeaggagae
                                                                     2160
ccccaggccc ctggaagctt gcaacatacc tcaaatcctg tcccaggtcc ggatcctcct
                                                                     2220
gaaagcettt ttegcagcac tggetatett ccaaagceat ttgtaaatgt gtgtacagtg
                                                                     2280
tgtataaacc ttcttcttct tttttttt ttaaactgag ggattgtcaa ttaaacacca
                                                                     2340
gttgttttct a
                                                                     2351
```

```
<210> 5767
<211> 2238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2205)...(506)
<223> similar to gi5912186 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5767 tttttttttt ttgatgattt ggatattatt attacaaaga atttaaatat acaagtttgg 60 ctatgaaaga cccagctaag ccacttaggc aaaagtctat ctttgatgtc atagtttcca 120 agaagtatca taagagtcaa acagttaaac atttctctgt gctttttttt tctattttct 180 aggaaatgtt gggtttagag agaagctcat caacttactt atacaaatca ggatatactg 240 agggggggg aggataaact cgacatttcc atattttata atataatgtg gaaagattca 300 gaaatgactg agaagataca gtgatatgat atttaaagca aatattggca tatgcttata 360 caagaaaggc atcttacaat aatatttctg ttggtacatt acaatttttc agctagtaat 420 tctaaaatgc cagaggtcct atgatgcaat atcaaaaaaa ccagggaact gacatacaaa 480 gtcaaatata aagatagtaa cattcagtca tccacagata aaaggctatc tggacataag 540 cctgaaacaa gcaagacgcc atccactgcg atttcgccgg ttttgccctt gccacgttct 600 gcttcaaaaa tgatgctttt ggtagcatca gttccttgat acaactgaat tttccctgtc 660 ttccactttt catcctcact cgtggtcttc tcccatgcca gggcattgtt actgtttttc 720 acadacactc gaagtttccc gactttgtct ccggccagcc ggtaatcaaa gagcaaacag 780 aagttgettt ggggttgeag gteaggtagg agaagtttea ateggeeaat gtettteett 840 gtgaccctgc caaaggccgg gaactgccaa tatagaagcc aaatagcatt atctccgatc 900 agraggatte ccagteaaaa teatettegt etateetgtt teecagteae agateeceat 960 gattgaaget geagteaace gagatattta aatetgettt atgtteeaqt ttqqaaqtta 1020 gcgctttcct ttggaccgag aatcaggccg aattcacctg cttcattcac cttagggaaa 1080 aacacatete cetegaaaag gtegeteeet eetatgteaa teetteaggg etttetette 1140 tettttetea teeteaagee cetettteat titetettea titeeettit tacceteeat 1200 gagagttccc gcctctggaa actatctctt catagttgaa gggctgcaag ttcaccttag 1260 gggtaggagt cctggtgggt tctggggtaa catttttaat ttttgccttc tttttcatgc 1320 tgtttttgtg agcaagcaac ttcttgattc tgtctttgat ggtaccaggt gctctqaqqa 1380 cttccttcac agaattttca gggatagcag aacaccgaag tccattgcct ttatatccct 1440 gettgeattt acaettgaag gaccettggg tattgaagca attggeatgg tggetgeacg 1500 tatggctatc catagtacat tcatttatat ctatacagtc atatcgtcca ctgatatatt 1560 gcagttcgaa accaatgtga catttgcagt agtagcttcc aaatgtgttc acacatcttc 1620 gattgtaggg acagatgact ttaccagagg cacattcatc aatatctaga cagtctcttc 1680

```
catttggggc caggcggagt cctgaggatg gacacaggca ctgtggccct tcttctgtgt
cttcacaget gtactgacag tttatcatgg cacatgteet agagttcaca cacgtageat
                                                                     1800
ctggcatgag catgtggcca ctgaggcaaa agcacttgta gcttccgtgt gtattcacac
                                                                     1860
atctgtgttg gcatggccgg ggtttcattc cacactcatt cacatcttga ctgcaggttt
                                                                     1920
teceggigia teciggadag cateigeatt tgittggice caegeaetea ceaaaettae
                                                                     1980
atecaggite geatgiaget teaeagaete cettgetgit tetteteeag cegtageage
                                                                     2040
aggecagttt agttecatag tgacagaece caggetgaeg tgeegatget aacaaecegt
                                                                     2100
gatgeettge aetggeegeg tteeegaaae caeetgeeae eeaggagage ageageggga
                                                                     2160
gegeaagget ecagggeaga ggeatteteg eaegggteet eetteeteet eetgageeee
                                                                     2220
cctcgggagg gcgccggc
                                                                     2238
```

```
<210> 5768
<211> 2123
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2023)...(1259)
<223> similar to gi930259 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5768 tggetcagga gageatttat aaacttetee teeaaceaea atatttaett gaggateeag 60 tecageecca teaatteeta gggttacatg etceetttt ttecagegag gatgaagggg 120 gttggttatt actagttcta aggggttaca ctgaccactg gtacaggaag ggccactttt 180 ccttttctga aggtggacag gatccttttc attttttgtc caagtagcct aagtgacaca 240 agaccagtat ccacgttcat ttccacacag ccctaattca tcacaaatgt acttattttc 300 tgccatatag cototttoot aattaagaga accacatoot attootaact tattactatt 360 aatgacagca caggcatcaa attttaaggt gacttgtttg ggcacccctt tttcttctgt 420 tttggctaac actttactca tatcatttat gagcccccac cagtcctcag tccttaatct 480 tattttaaaa accgtggtca tgggaggctc agatgggtca taacacacat caggttggtc. 540 acttectggg ctacatacct tgtacagaat aacattatac aaacaagtta tttttagagt 600 tccagtacac ttataataac cataaaataa taggactgta gcaacctttt gtcctacctc 660 agtgacttga tgtatacact ggaacagtcc tcagtctgag gaaggtcagt tgaagtcctt 72.0~ actgtaaaag tocaaatttt aaggaaaatg agttoogcaa tgagttttot catgottogg 780 ccgtgcgtgg accagtcage ttctgggtgt gactggagca gagettgteg tettettcag 840 agtcactttg caggggttgg cgaagctact cccgtccacg tacccctcac agtctactga 900 tgtttaagga tagtetegga ggttgggeet getagaataa aetgagteea aeacetetae 960 acagtatgtt caactagget etetgatace aggageaagg tggtggggtt tagggtgttg 1020 caaacttcag tggttatgtg gggattttca catagcaagc tttggtactt ggttaatcta 1080 gcatttgtaa ccaatgaggt cctttggtag tcattaaagt taccacagca tggggggcct 1140 ttatattcag gttttcctaa gggttagttt atctgcttct tgtgctaaca gggctgttgc 1200 tgctagggcc cttagacctg ggggccagcc tttggaaatc ctgtctagtt gttttgagag 1260 ataggccact ggccttggcc agggcctcac agtatgggtt aaaactccaa ctgccatttt 1320 ttctctttct gacacataga gtgtaaagag ttttgtcagg tcaggtagcc tcagggctgg 1380 gaccaacatg aggttttctt traactcatg aaaacctcgt tgttgttggt tgtaatagat 1440 gtagtttate taatctacat tittattaac tgtcacccac taaaatattg acttaaatcc 1500 tgcagctatt tgatttcaag ctttaaattg atctggtatt cttcgtggga ctccaattgc 1560 atctaaatag acatgagagt cgaaagaccc ataagggget tetetegett tacaatgtet 1620

```
ttottttttt cottotggtt gatgaaatgo cagggtgaaa gggatagoca attggactaa
                                                                     1680
agtacaagtg ccactccagt tattcggcag agtgcccagt aaaggtccac cacaatacca
                                                                     1740
ccacacatct gctcggggat gaacaagggc tgactgattg ataagctctt gaaaattctt
                                                                     1800
aagctaactg catcetttca ggtetecaag gaatgetaag ttteeteest gttgtqaqaq
                                                                     1860
acacgaagtg aacttagtgt tgggagacag aggctggatg gcccttgggg gctgatccac
                                                                     1920
agggtgctag actttgggat gtagcagaga gagcttggca tgacttatta ctccaggctg
                                                                     1980
tagaateeca gagaaggget accatgeage etaegeetgg ttgaetggag aaccaegtta
                                                                     2040
gtggaaaggg gacaatctgg gcctctggcc tgccatgtgt acacacataa caattqcttt
                                                                     2100
tgtttaatgt gcagatggaa tat
                                                                     2123
```

```
<210> 5769
<211> 798
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (141)...(722)
<223> similar to gi3150438 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

<400> 5769 ccagtgaaga aacgccagag tgtggaaagt ggaggacgac tgatgaagga tgcctgagta 60 cgtttttact tcaggctcta tgggagagaa tcagcttcct gtctgggtac ccacaagaca 120 tcttaagctg tgccatgagc cagaatccaa ggaagaggaa aagacctcgg aatgtccctg 180 cacccctggt tcatcagatg gctcagatga acatctctgt tgagcagatg gaaaccagta 240 aaacttgcca agcaactcca ccgacctgtg ggcagatgaa gagactagct cacattgcag 300 acgagaacct gaggteteag aacaagetge tgaccaccag taatetaatg atagetatga 360 tggcagtaat ctccttggcg gtgagtctcc ccgtagctgg ggcagatcaa aattacattt 420 attgggccta cattccattc ccccactgat taggtctgtt acatggttag accccctggt 480 ggaggtttat attaatgata gtgtctggat gcctggacca acagataact gaggtcctac 540 tcatccagag gaggaaggaa tgttaatgaa tgtttccatt ggttatcgct ttcctcccat 600 ctgcctgggg ccagcagcag gatttttaaa ttatgataaa caaatttgga tggtttatgt 660 ccctgcacat aatggatcaa aagcctctat tcatgcaatc agtggaagaa catttcaatc 720 tttggacact attaaatacc ttgagcatgg ctatgttatg acacatcqcc agattaataa 780 atttaaacct aataagaa 798

```
<210> 5770
<211> 1624
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (528)...(1488)
<223> similar to gi1685379 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5770
taaaagacag tgatctcacg cggaggggaa gatgtttgcc atcaaaatgt gacagaagag
                                                                       60
acacgctgca tggctcggaa cgcatctcct tggtggtggg ggaaagagac ttagaggaga
                                                                      120
gaggetgege cetggeecag cetggetegg etcageteeg egegeeatgg caagetegge.
                                                                      180
ttccctggag accatggtgc ccccggcctg cccgcgcgcc ggagcgtcgc cggccacttc
                                                                      240
caagacactg gccttttcca tcgagcgcat catggccaag acgtcggagc cccgtgcgcc
                                                                      300
ctttgagece eggeetggag egetagagge ggaeggeage cagggeaaga aactgeteaa
                                                                      360
cetetgeteg cegetgeect gtatgatece cetecagece etaggetaeg aggtgeegte
                                                                      420
aaagacactg ctcagttact cggagetetg gaaaagcage ctccgggegg geggeggegg
                                                                      480
aggeggegge ggeggtggeg geggeggegg egggggggee ecagtgtgeg gegeeagegg
                                                                      540
cttgtgcaaa accaactgtg gcgtgtgctg caaggccgag ctgggcctgg cgccgtccgc
                                                                      600
getgeeegeg ggeagggtea teaageegea ggteateaac caggetgtgg ggetgeegge
                                                                      660
cagoggotog ototactact toaactacot ggactogaco gogtacocgo ogtotgagot
                                                                      720
ceteagegge cacetettee egtetggeet ceteaatgeg caggeeceeg cegecetgge
                                                                      780
tgeteacece aagetettte tgetggagaa egecaagetg geeggeetgg etgeggacaa
                                                                      840
gtteececae eeggeteeet ateeceataa ggagegettg eeggegeege tggageaggt
                                                                      900
actgaaggaa aacteggeee tgaetgeega gegeggagge gteaagggee acageaaget
                                                                      960
gccaggaggc tccgcagatg gcaagcccaa aaacttcacc tgcgaggtgt gcggcaaggt
                                                                     1020
gtttaacget cactataate teaccegeca catgeeggte cacaceggag ceagacegtt
                                                                     1080
cgtgtgcaaa gtctgcggca aaggctttcg ccaggccagc acgctctgca ggcacaaaat
                                                                     1140
tatecacace caggaaaage cacataaatg caaccagtge ggcaaagegt teaacegeag
                                                                     1200
ctccacgete aacacgeata teegcateca egegggetae aagecetteg tetgegaatt
                                                                     1260
ttgeggeaaa ggettteace aaaaagggaa etacaagaac cacaagetga eccacagegg
                                                                     1320
cgagaagcag tacaaatgta ccatctgcaa caaggccttc caccaggtct acaacctaac
                                                                     1380
cttccatatg cacacccaca acgacaagaa gcctttcacg tgcgccactt gcggcaaagg
                                                                     1440
gttttgcaga aactttgact taaagaaaca tgtgcgcaaa ctccacgaca gcgtgggccc
                                                                     1500
tgctgccccc tccgcaaagg acctgactag gacagtgcag agctgaagag ctactgcctt
                                                                     1560
gcccttcctt ccctccctgt accacctgaa aacagatcac acatataaac ttatttctaa
                                                                     1620
                                                                     1624
```

```
<210> 5771
<211> 2641
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2517)...(411)
<223> similar to gi29472 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5771
ttttttttt ttaagagaga ggcaatttta ttcttccaaa aaaatgcacc aagagaggt 60
gagcacagga gcaccctgg ccacatccc catcctaagc agggtctgag atgaggccag 120
gcctgacgtg ggcttgggag aagctgacgg agctccctgt ggccttgggg agggaaccag 180
```

```
geagacetgg aagtggaact ttgttgttag caccaggage egeceacage tgggetegge
                                                                      240
aacagggcag cacatggccc tgttgcctcc acctgagagt ctggggaggg gctggtggca
                                                                      300
gaaggeteee tqeaggaggt cacetgaatg acteteagat teacagaeee cetetgeeee
                                                                      360
cacaaccct gtaaacatga gaatgggctc gtgacaccct caacacctca ggacaagatg
                                                                      420
agggtccgag atgtgtggct gggcttcagg cggcccagga gctgccgggc tttctcctgc
                                                                      480
atgaaaagct ggtccctggt ccccccgcag gccaccgtct tccaggcact ggacataggg
                                                                      540
gcaggtgtcg tgaagtggct tcggggcttc tgggccactg ctgccttctc gggcttggcc
                                                                      600
tgcaagaagc cctggttgag caagctgttg tcttctttga tacctgacag ggtgaggctg
                                                                      660
                                                                      720
gaagagtttg aaggggcagt tgtcggcaag gatagagact tgggcagtgt ggacátcatc
                                                                      780
agetteatat ceteateeac aatgteaaga geeagagaet teeggaettt ettgatgggg
etcegeegea geceaggett cetettetge ttetegggee tgatgtegte etcgatgatg
                                                                      840
agttcgatgc cagcctcaga acgcagcacc tccttcaagt cctcctccag gtgcggggtc
                                                                      900
                                                                      960
tgtggcaggg gcttcagggg tccgtacttc tccagggcgt tcttgaacgg ggttggcgtg
                                                                     1020
tggggagtgt tgtccatgga gtacttctga tctggggtta caaacgcagc atgtttctgg
                                                                     1080
tgcaggggtg tcttgtcccg gtgcagtggt gtggtgacca ccaccttctg gctgcacact
ggggtggatg teagegaggg getetecage tecaatgtgt cetgtttgtt ceagaagtte
                                                                     1140
agaaactggg agggcgagaa gggcagggtc ttaacaggtg tgctcttggg cgtgaggctg
                                                                     1200
ttacaggaat ccaggaagga cagactggtg ctattctcag tgacagggga cagagccaca
                                                                     1260
egectettee tetgeegett gageacagag ggeggtgtge caatgeeaga geceeegaet
                                                                     1320
                                                                     1380
tragtgrigg gggagatggg gatragetrg corregter traggetrag gretgagatg
                                                                     1440
gtgtggccat ccaggcggta ctcggtcaca ctgggcacca cgggcggaag gctggcggg
tggcaggact tgctgctgat gtgacgcttg cagctgcact aggctgttgt tgatactgtc
                                                                     1500
ctctgcagat ggttcctcag ggaggtcaaa tttactcagg tcacaccaag catcagggtc
                                                                     1560
cgactcgatc aagtccaggg cttcagagag gctagaaccc acagcgggga tgaggaggtt
                                                                     1620
agetgeetee accaeceact tgtaaggeag getegtttet ggtggggage etteetggte
                                                                     1680
etcacgette gggaatteet ecaagggete tggtgttege åetgegteea gåtetgtace
                                                                     1740
gatgggetee tgtteetteg atgtggtgge tgetgeaagt teeteeteae tgtttteete
                                                                     1800
ctcctttatg gtaggaggga cggagggcca gttggtcaga agacttccct ggccttccgt
                                                                     1860
gggetgggea etetggagge egteettgte etegagetee ageageaagt acaetggggg
                                                                     1920
ettgeagtet ttggaetege teaagaagee teetgtgtee acetteettt tgatggtaga
                                                                     1980
gttccagtga ttcttcacag cattgtctgt cctccctggc aacatcttgg cgatctcggc
                                                                     2040
ccagcggttg cccagcacct tgtgggcctc gcagatgatg cggtcctcct cctcggtcca
                                                                     2100
geaagaette tteaceteag ggttgaggtg gttgtgeeag egtteaegge aetgetteee
                                                                     2160
cagcoggccc ttcaggtgct tggcaatcag tgtccactgc ttttgtgccat acttcttaac
                                                                     2220
cagetegatg aetttttggt etteetettt ggteeatgge eeettgacaa ggtetggatt
                                                                     2280
caaaactete agecacetgt actggcattg ctggtcagtg cggttaggga agtggctggc
                                                                     2340
caggaacttc cagtcctgct gtccaaactg cctcaccagg gccctcagct gctcgtcctc
                                                                    2400
ctcatgggtc catttgacct tgcacttgct atccctctgc tccggcacat ctgaatctgt
                                                                     2460
gtcctggtag tgcagctcat ccatgattca ctcagcgcgc gtccgccgag acaatccccc
                                                                     2520
ggcccggacc gcgccgcgct cgcccgcccg ccggcagagc ccggagcggg agccgggccg
                                                                     2580
gggtcaggac ccgggctgct ccggccgctc cgggccccgg gccgcgctcg aaggcgtcag
                                                                     2640
                                                                     2641
```

```
<210> 5772
<211> 1523
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1524)
<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (1484)...(417)
<223> similar to gi3875351 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5772
cttttctaaa caaattttca cattqtaaac aaagcgtcct attttgtatt tgagttttgc
                                                                       60
ctttttcttc ctagggaact ataagagagt ttctgtgacc attaagagga ctccattttc
                                                                      120
accgctgaaa tagaattatt gcccttatag tcttgctggc aaattgttag aaaaaaagtt
                                                                      180
tatttacagt attttgcttt tccataccaa ttctagtgag aagttcacat tcttaaattc
                                                                      240
ccagtcagca actgcatttc tcccctccaa tgtcctctcc atgacttatc tctgaagttt
                                                                      300
cgagccaatg tttaaaatgt acactattta caaatgaagt gtccaaatgc catattccca
                                                                      360
gctctccagt cagcaggggg accettctqa agtgttgtca tgtgctggga ttcagaactt
                                                                      420
gaacaagttg ataaagtcct ggggtgaaag tgaaacggag cagctctctg ggttattggc
                                                                      480
agtgcacgga tggtcagtgc ccttccagga aaggatgtga cagtgtttgc agagctgaag
                                                                      540
ggtatctcca tactgctctt tccttgggta acatcggaca agtttgaaat acatcttctt
                                                                      600
ccaatccage tgecetttgt etgacagaat taategtttg eggatetgee geteggagaa
                                                                      660
gtggtactgg cagagtttet tecacageag ceggtetteg etgageaegt geaggteggg
                                                                      720
ggcagcctgg cccaggctga ccaggtcccg cccgtcgctc agcctctgca tgatgttcag
                                                                      780
ttgtaggcac aaaggcaggt cagtgaaggt gaggcctttg aaggcaggcc tggtgatctg
                                                                      840
aatgttgttc agctgctgct gccagtggag aatcgtctcc atccgataca cccacatgtt
                                                                      900
aatgttcccg accagcacag acttgccgac tctttggacc agtgtacata aggatgtgta
                                                                      960
gagggtctgg agtagttccc ttattagtct aatgttttgc tggtcttcaa ggactttcag
                                                                     1020
taccactttt tccaaaatat tcatgaagtt cttttgggcg atgccactca gggatgtgag
                                                                     1080
ctgtgacttt gctatcagct ccaacagccg gaccacgtag ttaaatcttc tggaatccag
                                                                     1140
aatggcagtt gagaagtcca gtctgttgaa agcttccccc agggtgcaat atccatggcg
                                                                     1200
ctctttagta cttcctttgt gaacatagat ccatttttct tggtggaaat actgagtttt
                                                                     1260
ggttttgcta ttcagcatgt ccttctttct cttcttggct gcaacatcat agttcaggct
                                                                     1320 /
gttgaaaaga ttctccttat tgtatacctc cttgttgcag taactgctga ggtcgctcac
                                                                     1380
gaaactgccg ctcttctcat ccaggaagcg cttccagccg tcgaccgtct tcacccagtt
                                                                     1440
ctgccccggg gaccgccagt cctgcccgag gaatggcatg gccccgcgag cgaattcaag
                                                                     1500
cncnccaact aatggtctcg aat
                                                                     1523
```

```
<210> 5773
<211> 6582
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6583)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (527)...(3388)
<223> similar to gi2224671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5773 tgcatgtccc cgcctcgcgc ggcggcggcg gcgggtgagg agcctgaggc ggcggcgggg 60 gtggctccgc gcgcggtggt ctcgggggca aaataacatg gcagccagac gaattacaca 120 ggagactttt gatgctgtat tacaagaaaa agccaaacga tatcacatgg atgccagtgg 180 240 tgaggctgta agcgaaactc ttcagtttaa agctcaagat ctcttaaggg cagtcccaag atccagagca gagatgtatg atgacgtcca cagcgatggc agatactccc tcagtggatc 300 tgtageteae tetagagatg eeggaagaga aageetgaga agtgaegtat ttteagggee 360 ttccttcaga tcaagcaacc cttccatcag tgatgacagc tactttcgca aagaatgtgg 420 ccgggatctg gaattttctc actctaattc tcgggaccag gtcattggcc accggaaatt 480 ggggcatttc cgttctcagg actggaaatt tgcgctccgt ggttcttggg aacaagactt 540 tggccatcca gtttctcaag agtcctcttg gtcacaggag tatagttttg gtccctctgc 600 agttttgggg gactttggat cttccaggct gattgagaaa gagtgtttgg agaaggagaa 660 gtcgggatta tgacgtggac cattctgggg gaggcttgac tctgtgctta ggggcagcaa 720 gtcaagtcca ggccaagagg tcgagctcta aacatcgttg accaagaagg ttccctccta 780 ggaaaggggg agactcaggg cctgctcaca gctaaggggg gtgttgggaa acttgtcaca 840 ttgagaaatg tgagcacaaa aaaaataccc accgtgaatc gtattactcc caaaactcag 900 ggcactaacc aaatccagaa aaacactcca agtcctgatg tgaccctggg gacaaaccca 960 gggacagaag atatccagtt ccccattcag aagatccctc tggggctgga tctgaagaat 1020 cttcggctcc ccagaagaaa gatgagcttt gacatcatag ataagtctga tgttttttca 1080 agatttggga tagaaataat caaatgggca ggattccaca ccataaaaga tgatattaaa 1140 ttttcccaac ttttccagac tctctttgaa cttgaaacag aaacctgtgc taaaatgctt 1200 gcctcattca aatgttcctt aaaaccagag cacagagatt tttgcttttt tactatcaaa 1260 tttttaaagc actctgcttt gaaaacaccc agagttgata atgagttttt aaacatgctt 1320 ttagacaaag gtgctgtgaa gaccaaaaat tgcttttttg aaatcataaa gccttttgac 1380 aagtacataa tgagacttca agaccggctt ctgaagagtg tcacaccttt gcttatggcc 1440 tgcaatgcct acgagctaag tgtcaagatg aagaccctca gtaaccccct ggacttggct 1500 cttgccctag aaaccaccaa ctctctctgc cggaagtctt tggccctttt gggacagaca 1560 tttteettgg cetettettt eeggeaggag aaaatettat aagetgtegg eetgeaagat 1620 atageteeet cacetgetge gttteeaaac ttegaagaet eeaetttgtt tgggegagag 1680 tacatagace acetgaagge etggetagte ageageggat gteeceteea ggttaagaaa 1740 gccgaaccag agccgatgcg agaggaggag aaaatgattc ctcctacgaa acctgaaatt 1800 caggccaagg ctccaagtag tctgagtgat gctgtccccc agcgagcaga tcacagggta 1860 gtgggcacca tcgaccagct tgtgaaacgt gtcatcgaag gcagcctgtc tcccaaagag 1920 agaactette teaaagagga eeetgettae tggtttttgt etgatgaaaa tagtetggag 1980 tataaatatt acaagctgaa gttggcagaa atgcagcgga tgagcgagaa cttgcgagga 2040 gccgaccaga agccgacctc agcagactgt gcagtgaggg ccatgctgta ctcccgggct 2100 gtccgcaacc tcaagaagaa actccttccc gtggcagcgg cgggggctcc tccgtgctca 2160 aggggetecg ggggetggaa ggegaggaga geegaecaec gggaeceaga eeeteetatt 2220 cctcagggca ccagggctga aacaccacgg ccggcaggct ccaggcctct cacatggcaa 2280 aaccatecet gecagacaga aatgattget gecaaggaet tgeeegetag acceagtttg 2340 gaccttetee teaggaceee agettagaag ceteaggeee ateceeeaag ceageaggag 2400 tggacatete tgaagcacet cagacetett etecetgeee atetgetgae attgacatga 2460 aagacaatgg gagaactgca gagaaactgg ctagatttgt tgctcaggtg gggaccagag 2520 atogaacaat ttcagcatag gaaaacagca cogataacco tgacctgtgg tttctacaat 2580 gaccaaaata gttctggctt tcaaattcta tccgaaagaa agtgtttgaa ctatgtccat 2640 caatttgttt cacgtcatct ccgcacaacc tttcacactg gtggtggtga caccacggng 2700 ttctcaggag agccccgtgg acctcatgga aggggaagca gagtttgaag acgagcccc 2760 tccgcgggag gctgagctgg agagcccaga ggtgatgcct gaggaggagg acgaggacga 2820 tgaggatggg ggagaggagg cccccgcttc ctgggagggg cgggccaagt cttgagggca 2880 geaccectge egacggeett eceggegagg ettgeegagg acgaeetggg ettggageae 2940 ctgccttgtt cacaggcctc cttcaggtta cctgctttcc cttcggaaga ggattcagca 3000 gcaagtcatt gaaggttggc atgattccag ctcccaagag agtgtgtctc atccaggage 3060 caaaagtcca tgaaccagtt cgaattgcct atgacaggcc tcggggtcgt cccatgtcca 3120 aaaagaagaa acccaaggac ttggacttcg cccagcagaa gcttgaccga taaagaacct

3180

```
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                                                                    3300
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acaaaagggt ctatggatgt ggatatgccc cattettacc ttccaggttt gctgaaggag
                                                                    4260
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caaacggact gttcctagtc cagagggcct tgccatcatg caagtggaag ggcgactgtg
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cttgggggat gggcctgagg cttctaagct ggggtcctga ggagaaggtc caactgggtc
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tggcgggcag tccttggcag catcatttct gtctggcagg aatggttttg cctgtgagag
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gcctggagcc tgccggccgc cctcgtggca agctaggagt aa
                                                                    6582
```

```
<210> 5774
<211> 2107
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1839)...(242)
<223> similar to gi188864 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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                                                                      120
tatatttata atttagagac gaaaaatacg gaatggcaaa gtgatgcctg ctgtagttag
                                                                      180
atctcaagat acctggatcg tttcccacaa acaagtgttt cttgacagaa ggggttaaca
                                                                      240
agggaccate ecagtgtete tatagtegee attggetggg gagegggget etgagagetg
                                                                      300
ggtcctcaga ggtttcaagg ggactgggat ctcccctggg gcagctccac aggcatgcct
                                                                      360
gttggaaggt agtccctggg tgatgggtgt tgttcccgta ggcttcaggt tgttctccgg
                                                                      420
gttggcggtc ttcttcttcc tcttcatgca gcacaccgtc agcaggacag agcaggagga
                                                                      480
gatgggcacg ctgatggcca ggatcaccca ggcgatatcc atcttgctca ggcagatggt
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ggctctgtgc tgcggtttgt ccccctcggc cacatgggag atgttccctg ctgtcccagg
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cttccaggtc ccggcggga ccaggcggtt gaggaaattg cctgtggctg tggataccac
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ggtatcatct ggtcctgctt atcctccagt ttattcatga ttctgtcctg gagtagaggg
                                                                     1980
tgtggaagcc ttcaaacgca cttacatcct catgacccat cggctctgct gcttttcact
                                                                     2040
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                                                                     2100
ccggctc
                                                                     2107
```

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<210> 5775
<211> 9401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (448)...(7689)
<223> similar to gi1665821 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5775 tagaggcaag tgaccagggt cgggacccgg gtcctcggga gtaccacagc cgctgttttc 60 etttetgtgg aggatgacaa tgataatgee eeccagttta gtgagaageg etatgtggte 120 caggtgaggg aggatgtgac tecaggggec ecagtactec gagteacage eteggatega 180 gacaagggga gcaatgccgt ggtgcactat agcatcatga gtggcaatgc tcggggacag 240 ttttatctgg atgcccagac tggagctctg gatgtggtga gccctcttga ctatgagacg 300 accaaggagt acaccetacg ggtgcgagca caggatggtg gccgtccccc actetetaat 360 gtototggot tggtgacagt acaggtootg gatatcaacg acaatgcocc catcttogto 420 agcacecett tecaggetae tgteetggag agegteeeet taggetaeet ggtteteeat 480 gtccaggcta tcgacgctga tgctggtgac aatgcccgcc tggaataccg ccttgctggg 540 gtgggacatg acttcccctt caccatcaac aatggcacag gctggatctc tgtggctgct 600 gaactggacc gggaggaagt tgatttctac agctttgggg tagaagctcg agaccatggc 660 actocagoac toactgooto ggocagtgto agogtgactg coctggatgt caacgacaac 720 aatccaacct ttacccaacc agagtacaca gtgcggctca atgaggatgc agctgtgggc 780 accagegtgg tgaeggtgte agetgtggae egtgatgete atagtgteat cacctaccag 840 atcaccagtg gcaatactcg aaaccgcttc tccatcacca gccaaagtgg tggtgggctg 900 gtatecettg ecetgecaet ggaetacaaa ettgagegge agtatgtgtt ggetgttace 960 gcctccgatg gcactcggca ggacacggca cagattgtgg tgaatgtcac cgacgccaac 1020 acceategte etgtetttea gageteecae tatacagtga atgttaatga ggaeeggeeg 1080 gcaggcacca cggtggtgct gatcagcgcc acggatgagg acacaggtga gaatgcccgc 1140 atcacetact teatggagga cageatecee cagtteegea tegatgeaga caeggggget 1200 gtcaccaccc aggctgagct ggactacgaa gaccaagtgt cttacaccct ggccattact 1260 gctcgggaca atggcattcc ccagaagtcc gacaccacct acctggagat cctggtgaac 1320 gacgtgaatg acaatgcccc tcagttcctg cgagactcct accagggcag tgtctatgag 1380 gatgtgccac cetteactag egteetgeag ateteageea etgategtga ttetggaett 1440 aatggcaggg tettetacae ettecaagga ggcgacgatg gagacggtga etttattgtt 1500 gagtccacgt caggcatcgt gcgaacgcta cggaggctgg atcgagagaa cgtggcccag 1560 tatgtcttgc gggcatatgc agtggacaag gggatgcccc cagcccgcac acctatggaa 1620 gtgacagtca ctgtgttgga tgtgaatgac aatccccctg tctttgagca ggatgagttt 1680 gatgtgtttg tggaagagaa cagcccatt gggctagccg tggcccgggt cacagccact 1740 gaccccgatg aaggcaccaa tgcccagatt atgtaccaga ttgtggaggg caacatccct 1800 gaggtettee agetggaeat etteteeggg gagetgaeag eeetggtaga ettagaetae 1860 gaggaccggc ctgagtacgt cctggtcatc caggccacgt cagctcctct ggtgagccgg 1920 gctacagtcc acgtccgcct ccttgaccgc aatgacaacc caccagtgct gggcaacttt 1980 gagatectit teaacaacta tgteaceaat egeteaagea getteeetig gggtgeeatt 2040 ggccgagtac ctgcccatga ccctgatatc tcagatagtc tgacttacag ctttgagcgg 2100 ggaaatgaac tcagcctggt cctgctcaat gcctccacgg gtgagctgaa gctaagccgc 2160 gcactggaca acaaccggcc tctggaggcc atcatgagcg tgctggtgtc agacggcgta 2220 cacagegtga cegeceagtg egegetgegt gtgaceatea teacegatga gatgeteace 2280

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 cageteacet tetetgeagg ggagtéaace accaeggtgt ceceattegt geeeggagga
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 gggagccatc ggggggcctg gccatgccat tctgtccttc gattatgggc agcagagagc
                                                                      4080
 agagggcaac ctgggccccc ggctgcatgg tctgcacctg agcaacataa cagtgggcgg
                                                                      4140
 aatacetggg ccageeggeg gtgtggeeeg tggetttegg ggetgtttge agggtgtgeg
                                                                      4200
ggtgagcgat acgccagagg gggttaacag cctggatccc agccatgggg agagcatcaa
                                                                      4260
 cgtggagcaa ggctgtagcc tgcctgaccc ttgtgactca aacccgtgtc ctgctaacag
                                                                      4320
 ctattgcagc aacgactggg acagctattc ctgcagctgt gatccaggtt actatggtga
                                                                      4380
 caactgtact aatgtgtgtg acctgaaccc gtgtgagcac cagtctgtgt gtacccgcaa
                                                                      4440
 geocagtgee ecceatgget atacetgega gtgteeceea aattacettg ggecatactg
                                                                      4500
                                                                      4560
 tgagaccagg attgaccagc cttgtccccg tggctggtgg ggacatccca catgtggccc
 atgcaactgt gatgtcagca aaggctttga cccagactgc aacaagacaa gcggcgagtg
                                                                      4620
 ccactgcaag gagaaccact accggccccc aggcagcccc acctgcctct tgtgtgactg
                                                                      4680
                                                                      4740
 ctaccccaca ggctccttgt ccagagtctg tgaccctgag gatggccagt gtccatgcaa
                                                                      4800
 gecaggigte alegggegte agigtgaceg eigtgacaac cettitigetg aggicaceae
                                                                      4860
 caatggctgt gaagtgaatt atgacagctg cccacgagcg attgaggctg ggatctggtg
geocegtace egetteggge tgeetgetge tgeteeetgt cecaaagget cetttgggae
                                                                      4920
                                                                      4980
 tgctgtgcgc cactgtgatg agcacagggg gtggctcccc ccaaacctct tcaactgcac
                                                                      5040
gtccatcacc ttctcagaac tgaagggctt cgctgagcgg ctacagcgga atgagtcagg
 cctagactca gggcgctccc agcagctagc cctgctcctg cgcaacgcca cgcagcacac
                                                                      5100
 agetggetae tteggeageg aegteaaggt ggeetaeeag etggeeaege ggetgetgge
                                                                      5160
 ccacgagage acceageggg getttggget gtetgecaca caggaegtge actteactga
                                                                      5220
gaatetgetg egggtgggea gegeeèteet ggacacagee aacaagegge aetgggaget
                                                                      5280
 gatecageag acagagggtg geacegeetg getgeteeag cactatgagg cetacgeeag
                                                                      5340
 tgccctggcc cagaacatgc ggcacaccta cctaagcccc ttcaccatcg tcacgcccaa
                                                                      5400
 cattgtcatc teegtagtge gettggacaa agggaaettt getggggeea agetgeeeeg
                                                                      5460
 ctacgaggcc ctgcgtgggg agcagccccc ggaccttgag acaacagtca ttctgcctga
                                                                      5520
gtctgtcttc agagagacgc cccccgtggt caggcccgca ggccccggag aggcccagga
                                                                      5580
gccagaggag ctggcacggc gacagcgacg gcacccggag ctgagccagg gtgaggctgt
                                                                      5640
ggccagcgtc atcatctacc gcaccctggc cgggctactg cctcataact atgaccctga
                                                                      5700
```

```
caagegeage ttgagagtee ccaaaegeee gateateaae acaeeegtgg tgageateag
                                                                    5760
cgtccatgat gatgaggagc ttctgccccg ggccctggac aaacccgtca cggtgcagtt
                                                                    5820
ccgcctgctg gagacagagg agcggaccaa gcccatctgt gtcttctgga accattcaat
                                                                    5880
                                                                    5940
cctggtcagt ggcacaggtg gctggtcggc cagaggctgt gaagtcgtct tccgcaatga
gagecacgte agetgecagt geaaceaeat gaegagette getgtgetea tggaegttte
                                                                    6000
teggegggag aatggggaga teetgeeact gaagacactg acatacgtgg etetaggtgt
                                                                    6060
caccttggct gcccttctgc tcaccttctt cttcctcact ctcttgcgta tcctgcgctc
                                                                    6120
caaccaacac ggcatccgac gtaacctgac agctgccctg ggcctggctc agctggtctt
                                                                    6180
ceteetggga ateaaceagg etgacetece ttttgeetge acagteattg ceateetget
                                                                    6240
geacticetg taccietgea cettitectg ggetetgetg gaggeetige accigtaceg
                                                                    6300
ggcactcact gaggtgcgcg atgtcaacac cggccccatg cgcttctact acatgctggg
                                                                    6360
etggggegtg cetgeettea teacaggget ageegtggge etggaceeeg agggetaegg
                                                                    6420
gaaccetgac ttetgetgge tetecateta tgacaegete atetggagtt ttgetggeee
                                                                    6480
ggtggccttt gccgtctcga tgagtgtctt cctgtacatc ctggcggccc gggcctcctg
                                                                    6540
tgctgcccag cggcagggct ttgagaagaa aggtcctgtc tcgggcctgc agccctcctt
                                                                    6600
                                                                    6660
egeegteete etgetgetga gegeeaegtg getgetggea etgetetetg teaacagega
caccctcctc ttccactacc tctttgctac ctgcaattgc atccagggcc ccttcatctt
                                                                    6720
ceteteetat gtggtgetta geaaggaggt ceggaaagea etcaagettg cetgeageeg
                                                                    6780
caageceage cetgaceetg etetgaceae caagtecace etgacetegt cetacaactg
                                                                    6840
ccccagcccc tacgcagatg ggcggctgta ccagccctaa cggagactcg gccggctctc
                                                                    6900
tgcacagcac cagtcgctcg ggcaagagtc agcccagcta catccccttc ttgctgaggg
                                                                    6960
                                                                    7020
aggagteege actgaaccet gggeeaaggg ceeeetggge ttggggggat teeaggaagg
                                                                    7080
cctgtttcct gggaaggttc aaagaccagc agcattgatt cctgaacaag ggatttcgac
agtgacctgt ccttagaaga cgaccagagt ggctcctatg cctctaccca ctcatcagac
                                                                    7140
                                                                    7200
agtgaggagg aagaagagga ggaggaagag gaggcegcet teeetggaga geagggetgg
                                                                    7260
gatageetge tggggeetgg ageagagaga etgeeeetge acagtaetee caaggatggg
ggcccagggc ctggcaaggc cccctggcca ggagactttg ggaccacagc aaaagagagt
                                                                    7320
agtggcaacg gggcccctga ggagcggctg cgggagaatg gagatgccct gtctcgagag
                                                                    7380
gggtccctag gccccttcc aggctcttct gcccagcctc acaaaggcat ccttaagaag
                                                                    7440
aagtgtetge ceaceateag egagaagage ageeteetge ggeteeeest ggageaatge
                                                                    7500
acagggtett eceggggete etecgetagt gagggeagee ggggeggeee ecetteeege
                                                                    7560
ccaccgcccc ggcagagcct ccaggagcag ctgaacgggg tcatgcccat cgccatgagc
                                                                    7620
atcaaggcag gcacggtgga tgaggactcg tcaggctccg aatttctctt ctttaacttc
                                                                    7680
7740
cteatgeest geteetgtet tgtgetttat cetgeeeege teeecatege etgeeegeag
                                                                    7800
cagegaegaa aegtecatet gaggageetg ggeettgeeg ggaggggtae teaccecace
                                                                    7860
taaggccatc tagtgccaac tccccccca ccattcccct cactgcactt tggacccctg
                                                                    7920
gggccaacat ctccaagaca aagtttttca gaaaagagga aaaaaagaat ttaaaaaagg
                                                                    7980
atctccactc ttcatgactt cagggattca ttttttttat acgctggaaa ttgactcccc
                                                                    8040
tttcccttcc caaagaggat aggacctccc aggatgcttc ccagcctctc ctcagtttcc
                                                                    8100
catctgctgt gcctctggga ggagagggac tcctgggggg cctgccctc atacgccatc
                                                                    8160
accaaaagga aaggacaaag ccacacgcag ccagggcttc acacccttca ggctgcaccc
                                                                    8220
gggcaggcct cagaacggtg aggggccagg gcaaagggtg tgtctcgtcc tgcccgcact
                                                                    8280
geeteteeca ggaactggaa aageeetgte eggtgagggg geagaaggae teagegeeee
                                                                    8340
tggaccccca aatgctgcat gaacacattt tcaggggagc ctgtgccccc aggcgggggt
                                                                    8400
egggeagece cageceetet cetttteetg gactetggee gtgegeggea geecaggtgt
                                                                    8460
ttgctcagtt gctgacccaa aagtgcttca tttttcgtgc ccgccccgcg ccccgggcag
                                                                    8520
gccagtcatg tgttaagttg cgcttctttg ctgtgatgtg ggtgggggag gaagagtaaa
                                                                    8580
cacagtgctg gctcggctgc cctgagggtg ctcaatcaag cacaggtttc aagtctgggt
                                                                    8640
tetggtgtee acteacecae eccaecece aaaateagae aaatgetaet ttgtetaace
                                                                    8700
tgctgtggcc tctgagacat gttctatttt taaccccttc ttggaattgg ctctcttctt
                                                                    8760
caaaggacca ggtcctgttc ctctttctcc ccgactccac cccagctccc tgtgaagaga
                                                                    8820
gagttaatat atttgtttta tttatttgct ttttgcgttg ggatgggttc gtgtccagtc
                                                                    8880
ccgggggtct gatatggcca tcacaggctg ggtgttccca gcagccctgg cttgggggct
                                                                    8940
tgacgccctt ccccttgccc caggccatca tctccccacc tctcctcccc tctcctcagt
                                                                    9000
tttgccgact gcttttcatc tgagtcacca tttactccaa gcatgtattc cagacttgtc
                                                                    9060
actgactttc cttctggagc aggtggctag aaaaagaggc tgtgggcagg aaagaaaggc
                                                                    9120
```

```
tectgttet catttgtgag gecageetet ggetttetg eegtggatte teeeetgte 9180 teeteeete ageaatteet geaaaggtt aaaaatttaa etggtttta etaetgatga 9240 ettgatttaa aaaaataca aagatgetgg atgetaaett gatactaaee ateagattgt 9300 acagtttggt tgttgetgta aatatggtag egttttgttg tegttgttt teeatgeeee 9360 atactaetga ataaactagt teetgtgegg taaaaaaaaa a 9401
```

```
<210> 5776
<211> 2746
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2598)...(606)
<223> similar to gi5579331 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5776
tttttttttt ttagagcaaa tcaactttta tctccaccga aaagacccat tccactggag
                                                                       60
gggcccgtga gctagacgga cttgccgtcc agccctccaa gccccctgcg gggcggccag
                                                                      120
gaggatecet gagtecaget tgtaaacace agagecagee etggageete aggeetetgg
                                                                      180
agtcacggca gcccctccag acccttggat tggggacatc tgaggcttca cgagcccggg
                                                                      240
cagagetgea ecetgggetg tecacteggt caceceagta ecagggacea ectegaagee
                                                                      300
eccetetggt eggeecaeag agacetgete aggetteage aategtgagt catgattegt
                                                                      360
gtettetgga ggaageagge ggaggeteea geggeeeage ceaceeegea teacaceaag
                                                                      420
actgacggcc tcacttgtcc tcacggtgtc ctgattaaag cagagacgag gaggagccca
                                                                      480
gagecagtte agagectggg ceaettggeg gttgeeggtg etaegtggge cettggaaaa
                                                                      540
tgccacagac ccagcaaggt gcctctgccc acccgaagtc cccacaccag cagccatcca
                                                                      600
ccctaggcag gggtccagat aggcagaggg tgggcttcgg tgttgaacac gtaggcgtcc
                                                                      660
aggetgagea ggtttgggte ateggagaag ageaagaaca gataettgag egteteecee
                                                                      720
aggaagaagc totocatott gtoodtaggo togggottot gaggatootg gacattgttg
                                                                      780
atggaagaat agccacccga ggggacccgt gtgaatcggc tgaagctctg cagaatctcc
                                                                      840
cagececagt cetggtattt geggteecet gtgaegeggt acaggtagaa caggetetee
                                                                      900
acggtetetg geogeageag gttgtgeetg tetgetgget tgaeeteeae gteeegaegg
                                                                      960
eccggetggg ggtaaaggtt gaagtgeaeg atetegggae teageecegt efecatetge
                                                                     1020
cggttcatct ggtaacaagt ctccatgagc tcctgggcca gctccatgtg gctggcgggc
                                                                     1080
aggccgtggt agacgcccag agccagcgtc cctggcagga agcacaccag gtggtccatc
                                                                     1140
ttggcactga ageggeegtg ggcaagetee eecacaaagg tgagettaet gggeteggag
                                                                     1200
tgccgcagca ggtgcgttct gacaccctcg atggcttcca cgtagtcttc cagcagctgt
                                                                     1260
gteteetget teeegeeetg gateeaetge tteageaggt aeteatagta getgteggee
                                                                     1320
ctggcgccca gcgtgaatac gcccaggtgg gtgaagaggc cactgtgggt attgatgaac
                                                                     1380
atgggcacca gcccatcctt cttcccagac aggccgtgga tgtgctgtgt caccttctcc
                                                                     1440
actgootoot gaaacttott atcooctgtg agacgggaga gotoocggaa otcoagotga
                                                                     1500
atgctggtca cctcggccac agtgctgtcg gaggtccacc gtggcgggtg ggcaactcca
                                                                     1560
gtaccgatgt tcacatccga gtaaggaatc ttggatggtg ttctgaaggc aggcattagc
                                                                     1620
cgatttccaa aatcctcagc tttcctcagg aagaggctgt ccccagacag gtggtaggca
                                                                     1680
ctcaggagcc cccccaggat gcggatcgtg ctctcaaaca ggttgacgtc cacgtccttt
                                                                     1740
tcaaagtgta acttcttcga cacccacttc ctggcttcct caaattcttt cctcagaccc
                                                                     1800
aagatccaca tggtgtccag cgcgtcgatc agtgtgagac cgaggccaaa ccactcactg
                                                                     1860
aaggacetgg acacaggett cagetegtea tggeeceatg caaacttgeg gtateettte
                                                                     1920
```

```
catgcatgca ggagaacgtc aatcacgccc ttctggcgat agttcagaat gcactggtgt
                                                                1980
gccctgtgtc ctggccggtg gcaggggagg cttggtgggc acttctgctc ttcttgaagg
                                                                2040
gageteggtg ceetgeteag getegateae egeteeeete eagetgatga etgteetetg
                                                                2100
eggateteet teegggeggg gateeaeagg ggettettge etttttgtgg eeteeteetg
                                                                2160
2220
gatgtgtctt tgtgtcttct gtgacgaaat ctcaggtaag ttctcagggt cggtgtccgc
                                                                2280
cttctgagga gctggtaaga cgggtggatt tgctggtttt aacccagcaa tttctggcct
                                                                2340
catcttctgc tcttcctcta gcctgaaagc cagagctttc caatggtcag ccaagttgat
                                                                2400
gtagaagagg agtcctcaga aaagcagaaa ggcaaggagg aagagaatca tattccgctg
                                                                2460
caatetegae agttgettee attteeteea geaegagege egeegeeaae tettgetgtt
                                                                2520
gtcatagctc tcgccaaagc tcagcgtcac cgagatgaag tcccgatgag gcggcggcgg
                                                                2580
cggcggtggg tacatgacta cagtggtggc gacggcccaa ggggccccgc ccactggcgg
                                                                2640
cgtcaggaag tccgactgag aggaaccgag agctccgctt ctcctgccct cgcaggcagc
                                                                2700
categoageg cegteaacae gaaategteg acceageaag teggte
                                                                2746
```

```
<210> 5777
<211> 2841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2842)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2044)...(367)
<223> similar to gi3142288 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5777
ttttaattgt ttttctttt cttttttt ttttaataag ttaaagttaa tacaaatata
                                                                       60
aaaaggggaa agtcctctag attcaatgac atccacaaat tgtacattat ttacaccaaa
                                                                      120
agcacagggc tegtgtgggt gaacagtetg cagteaaage egatgetggg tgteeetqta
                                                                      180
gtgtagcagc ccccgcgccg ggggctcagg cctcaactga gggttttggt catttttcaa
                                                                      240
gtctgaaaag tgggctgttc tccttgcctt tgttgtttct tcttttcctg gccgtctggg
                                                                      300
ttttttctcc acaatggggt ggggtgggtt tgtgtccccg attcacttgc tagtccccaq
                                                                      360
aaagggtgtc ccagcccgag actcctttcc gggaaggagg ctccttccgt gctgggtact
                                                                      420
gggtggttgt gatcggaacg tgttcgatcc cctcttctca tcactgctgc tccaactgga
                                                                      480
tttattactc ccgggaatgg tcagagcctt ggttggagcc taagagaatg gaggaggcg
                                                                      540
tetetetgga gecagaaagg teaagggteg agecaetete ettgetttte teagetgaeg
                                                                      600
teteettete titiggaagge getggeegtt tetgaaggtg etgattgtgt getegaggag
                                                                      660
ctcccctggg aggacttatt tagtgtttct gtgttcacct tcagcatccg cttcctgctt
                                                                      720
gaggagcagt agetgactgg gtgcaggact tcaatgtgct caggccagtg ggcttgcttg
                                                                      780
gcaggggtag`tcacagtagc tggtgttcca acagcagtaa aagatggcct ccttcttgaa
                                                                      840
gttggcgcac cactgcttct tcttggtctc atccaccgcc tgctgcttct ccaactccag
                                                                      900
etgettette aceteggega tgageeggte eegeteetge teecagetet geegeatete
                                                                      960
cgccatggtc agctctaagt tgtgtttcat ttcggagaag ctcttgctgg tgcagccact
                                                                     1020
ggagettete tatetegate etcaageett gegaatette agetaattgt getttecaag
                                                                     1080
```

```
tagtggtttt tagaaagatc gttgtatatt tctgtccatt gtacctttta ttgcatccat
                                                                     1140
ccaatttgct agtgtacttg gcaatatcag cggcgacatc agctgaggca gtgccgatgg
                                                                     1200
gcaggtcacc gttgactgag gacacaaggg tgctcatgga ccccgagctg gtgaccaggg
                                                                     1260
gegatgactg tgtgctggtc accagggtga tggtggacgt ggatgggctc tgtgtgatct
                                                                     1320
cettetgetg gacagttgat gaagttecae acgacegetg caeggeeggg geagteetee
                                                                     1380
ttcggtaaaa gcggcctctg ctttttcact gggcttcctg tggcggcggg ggccggggcc
                                                                     1440
gtgacggtga ccgtggagga cgtgctggtg gtggctgtgg cgccagccgc ggaagtttgg
                                                                     1500
geggaagage gggtgageae eggtgtttee gggggagaat ggetgeeeae egtegtggat
                                                                     1560
ggtggtgttt tacctacaac atcctgtttg ggagatggtt ctttgggttc cttcttattt
                                                                     1620
tttcgaccct cccgcccaga atggtcttct cctaaatcta tgacaagttc gttcctctga
                                                                     1680
atcagagtcc aggcccaaat gaactgtggg ggaatccgtc tcatcttttc ccttcagttt
                                                                     1740
atcettaatg gggtgaggtg aaggttttge ettteeggaa aagteettet eaggeteagg
                                                                     1800
getggcettg teettgaetg etceagggte tgeetteteg etggetggtg aegtgetttt
                                                                     1860
cageteetet ttaateteea etgggtttgt aggettggge ttttttttaa eageagatgg
                                                                     1920
ctctttgtcc atctgacaac cttctttgtc ctctgtgtct tcctggctcg ttccttaaga
                                                                     1980
cttctgctca tcatcactga tatactcact atcgctacta tctgacttct cagaatcctc
                                                                     2040
cgaatcgctg tgctctacgg ccgtatagac atcttccgag atttcattta tgcctaattg
                                                                     2100
tgctttgcaa ctctctatgg tcttgtcaag attcagctgg aacctgctac gaatctggcg
                                                                     2160
cttgggagag atgagaggaa caggggtgga ctgttgctgg accgactcgc tcagctcctt
                                                                     2220
caaatccatc tcagctttgc ttcgatccag gttaagattc aggatgctgc cggtggtgga
                                                                     2280
ggttttgtcc gttttcgtcg tgataggagc tgacagttga ggagagaagg gctttgggct
                                                                     2340
gccggataaa ctccctgctt gtcccgtctt ggtggaggct ggtgaagctg tgctcttatc
                                                                     2400
caggaagtee atggacteet egetegeact gaagtggete gaegtggeet tetteteage
                                                                     2460
atcctgctcc acgtcggagc ccgtgtgcac agaagagttt gtgctcatgg gggagcgcgg
                                                                     2520
catateegae aaggaaatee ggeggeetgt geeeceaete ageacagget tgeteateag
                                                                     2580
gatettgggg gatgeegtea tgteaaagtt gagettgace tteteetget tgtetatett
                                                                     2640
ggcagtgccg gcgctggggt tggtgggatc gagcagcatt tgatactggc tgttgggtgt
                                                                     2700
gtagggtgtc ctaaatggag agtaattaaa aaccccaaac ttcctgcgga tgttctccac
                                                                     2760
gtaaacctcc atctcttgca tggcactgtt gaagatgctc ttagtctttt tcacanaaaa
                                                                     2820
aggaatttct ttagacatga g
                                                                     2841
```

```
<210> 5778
<211> 2522
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1720)...(604)
<223> similar to gi330123 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5778
aagcaacgaa acataaaaca cacaagcgcc ccgtgccccc agtgactctg ggcctcacag 60
agcccccgcc agccactg gggccccgcc ctgcagccag tcacgggccc ccacaccgca 120
gccccccgtg gctgtccttc caaccccacg tgctttttct ttctcctgcc cgcttctttt 180
cttcatcaca aaaggcgtgg agactcggag acggacgttt ttcccctttt ttaagttatt 240
gacgcccagc gcgcctcgcc tcttcaccca tcaacgctgt gctttgccca ctggactcct 300
gaagaggggg tggggggctc cctcggtcgc ccaccctggg aagtgcctaa ccttttattt ttttgaggaa aaagaacgcc tgactcacag gttgaagaaa caccctgggc 420
```

```
cctctctcat ggccgggttc cccgtccctc tgcagaggct gggaagggtc cccgggctgg
                                                                      480
agecaegggg gettetetgg getgtgeete eggggeeaac aetggetget tggggetgee
                                                                      540
cggggactec agagggetge acggecacce tgccctgget agagegeace ccaccggage
                                                                      600
ccacgtgggc tgggcggctg gagggatggt cccccggtga cactgggaga aaggccactt
                                                                      660
ggatgggggc gtttctgttt tgttccgctt tgtgatgtca ccaatttgga aacagcgagg
                                                                      720
gtgggtgggg acttttacag aatattctca ggtgtgtacc cgagaggcag agagagggac
                                                                      780
gtggccggca getetgtgcg tggcettgtc ccaagcactt gcgcccgccc ccgagcgccg
                                                                      840
cccccgggga gcgggaagcc agcactcgca ctttggccag gggcgcgtgg aaggtggtgg
                                                                      900
caggcacegg cetgggcage ttecaggeet ggetggecae gaccaeggee egagggggag
                                                                      960
cccgccagge cacgccgcac tgagccacag ccccgggggc cgcctcccgg ggccccttga
                                                                     1020
ggcactgagg caccgagact ggttctcccc gagagactcg gaaggtgggg aacgagggga
                                                                     1080
ctgtgtttgg ggaggtggct ttttcgtctg ctgttgactg aacactacag cgccctgtgg
                                                                     1140
tteegggett egeacagetg teecagggat gggtegeetg tgetgeette geeegeegee
                                                                     1200
acacegggae cetgeaegge tgettetgge etegacagat gacaaaagaa acageeccaa
                                                                     1260
aatacgacca ctccaaccag cagttcccgc ctgcctgccc gccactgtca ggcctgccct
                                                                     1320
ggcctcctcg tccgcagggc tgtctgctgg cttctggggg cagaagagcg gggagccccg
                                                                     1380
tggaagggtc aggggagacc aggtcagggc agctacattt ctggtgatca gccccatggg
                                                                     1440
gagacggggc tggcgggata ccgcccccc ggcttcccca caccacttct gtctcacccg
                                                                     1500
gaagegteet ttttttgtee caggtgteta eetaagaggg ttggtgeeag aageeecea
                                                                     1560
tggcgagtgc tggggcccgg cggtgccctg ggggagcaga tggggccacc cctggcaggg
                                                                     1620
cegetacaac titticcage ageggagece tetgggggge etgtgetigt ggeatetetg
                                                                     1680
agggcccaga ttgcacaagg tgacctggcc gtggcctgag ggtggagtcg cccagcacgc
                                                                     1740
aggeegggge getgegggge taagtattag geetteecag ggagggggeg tgeeaageat
                                                                     1800
cccagagoog ggotgggaco gocaaaacgt cgtggcotgg atcototggg totgagtgco
                                                                     1860
tgatcccctg cccccaaaa aagcagaggt aggtgttgca ggcccagggc aggggtgcct
                                                                     1920
gececaggag agteceagge agtggttete gtgecagtgg caeceagggg caaggacage
                                                                     1980
caacccccac cettgccacg tgtggggcca cgtgggcatg tggggtgtgt gtttttacct
                                                                     2040
tggtgaatct cacctgccaa cgatttctcg tgagtgccga ccaccttctc cgaccatgtt
                                                                     2100
acgcccgggc ggcagcagcc cccggccact gcaaacccat gccctgggtc ccccggctcc
                                                                     2160
cccagggagg catccccgtg ccaatgtccc ccagtggtgg cagcagatcc tgtggccggc
                                                                     2220
ctggcggacg ggacccagtg atacttgtat attacacagt cctgatttca gacaatttca
                                                                     2280
accttaatct atttaaaaaa gaatattcta tacaagctgt ttttaagcct tttaccattt
                                                                     2340
gaaatgcatg tgttgtgcgc gttggggatg ggaggagggg ctgaggagcg gctcagtgtc
                                                                     2400
acctcccaca gccaccggcc ctgaccctta atccagacac cgatggaagt cgacttttca
                                                                     2460
tatctttctc ctgaaatgaa ctctgtttta aattggaata aattttgttc ctaaaaaaaa
                                                                     2520
                                                                     2522
```

```
<210> 5779
<211> 3152
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2804)...(208)
<223> similar to gi433338 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5779
ttttttttagt tctttaatgt aaaaaaaaa aagtatatat gagtcagggg tagggagtgg

```
gggtgaccag gaaaagaggg caaagcaaac aagcctctgt ctctcagttt/cattaaatgt
                                                                      120
ccagatggag tggcataggc atgggtgagt ggtaggtctt gtagggagga cctgagccgt
                                                                      180
aggaacatgg ccaggcactg acagcatcac tcgtcgcctt gttgaaggag cagaaggtgg
                                                                      240
atttettgga atgagggacg gttettegta tetettetee ageagetgag cateagettt
                                                                      300
attacacagg agtcagggac aaatgggctg gttgagggga ggtaagtctg ccctcccttg
                                                                      360
ggtcttcgga agaactctcc agtatttctt caataacctg tttcatctgg acagctgggg
                                                                      420
aataggggcc ttttctttga caaaaggtga aagttttccc acaaagtaac ccccaaaggc
                                                                      480
ccacacatca cttgctgtag tgaacttgcc cagcaagata ctctcccaag acatccagcg
                                                                      540
gatagggage actgecegge cetggateeg gtaatagtea ceaetgtaca ggtteetget
                                                                      600
                                                                      660
cattccaaag tcagctatct tgattgtgta gttcttaccc actaaacagt ttcgtgtggc
                                                                      720
cagatetegg tgaacaaaat taagagagga aaggtaette atgecagagg caatttgggt
                                                                      780
agccataaac ttcagattgg tgtaactgac agtgcgtaca tcgctggagg aagaattagg
                                                                      840
gggetegtgg egggaaagaa aetgattgag atetecatte tecatgtatt eagtgateat
                                                                      900
acagagaggg tcatcagtga tacacacaga taatagatgg atgatgtttg ggtccttgag
ccgagacatg atctttatct ccttaagaaa atcattcctg gcattcttgt tggcatctgc
                                                                      960
                                                                     1020
teggageatt tteacageea eeaggaeagg etggttggea etgaeateta gggeaaaate
tttgtctttg aatttttcca ttccctccac ttcacagaga tgaacctccc caaactgtcc
                                                                     1080
ttctcccage ttctctttga aagttaggag tttccctggg ggaaactccc tcccacagec
                                                                     1140
                                                                     1200
acatetttte eetgagagea ggteeatggt gaeggeagge aetgagtatg tgttgeetee
tgtcactcct tggaggttca ctatgtcagc ctctgcatag tggggcaccc cctcagggcc
                                                                     1260
actgggctgg actggcttca caacaccgct gcagcctgac tectectece ctggagcaaa
                                                                     1320
                                                                     1380
ttctgggagt tttcgtatca gcctggatgg ctcctggtag tcagggcgaa ggggaaagat
gcgatcgtaa gtcgagttgg acccttgttc actaggtgat gaggagcggt tattgttgaa
                                                                     1440
catgctagaa tcacttggca gggaaaggct gactgtcatt tcatcatcca gcatcctccg
                                                                     1500
                                                                     1560
agaageette teeageattt tetgeeagaa etgeeteeag aggatgatga caatgattgg
caggaggatg aagatgatgg ccaccaagca gccaatcagg atgcgagtgt tgctgtcatc
                                                                     1620
aactttaage attggateat aggttgtggg tgecatagga gaggtgggea gggetteaga
                                                                     1680
gttgttgtac attgcagcat ctgattggaa ggtgatctca ctgaacatca tccaggtatc
                                                                     1740
tgcaaaatgg tattgacact tgatggcact ggccattcgg tggtggagag gcaccgtgac
                                                                     1800
aaaccgagca ctggggttga cgtcatccag gacaaggggg aaggaaatgg cattaggttc
                                                                     1860
ccactcactg gcttcagagc ggaagtagca ctgtacctcc ttaaagatct tcacaccttt
                                                                     1920
agcaaacatg ttgttgcagt ggaccttcat ggtagtgaaa ttcctgatgc ggtcaaattc
                                                                     1980
aaacatgate teaatgtage cattggtgge actetegtte egecageeea catagteata
                                                                     2040
geegggeeae aegtggtatt catgggtetg ggtgaaateg teeaggeeag acacaccate
                                                                     2100
ggtcaattgg cctagccctt ctgtcatgct gtatccaaca gctccatcat agacagaatc
                                                                     2160
attcagataa atgatggaac ctccagggag tacaaactgc tgcccagctg gagcattgta
                                                                     2220
agacaccaag ccatctagcc agacacagcc gtaaagctcc actctcatac acacattcat.
                                                                     2280
ggagtggtcg gtgactggaa tgaaccggac aaatctggct acaatgggcg gctccaagtc
                                                                     2340
ctttaggaaa atgtcatagg ggttactatt tccatccagc acctgtttcc catgacggtt
                                                                     2400
ccgccaagag atccagcgag tgccatcccg actgtaattg atcttgtaca tgggggcaaa
                                                                     2460
ctegatgeca tgaceteetg catggegece etgggteece accagagtga taaaatggag
                                                                     2520
ggtgtgcaag tcaatctgca gaaactcctt caggtcatca ggttccactg gaatctcagg
                                                                     2580
gcaccagget ccateccett ettetgagte cageetteca tatttggcag etgtggacte
                                                                     2640
tgaccactga ctggaagctg tgatgtcctc atctggaatc tggcctcctg acatgcccag
                                                                     2700
aggatagegg catatagetg gattaacetg agettttgea gaacteaaga taggeageag
                                                                     2760
caggaacagc accaagagca ttctgggaat caggatcatc tcagaagatg gtgttggaac
                                                                     2820
tggagtatca acgggtgcag agcattctct gtggagcagg atcctcaaaa acagctggcc
                                                                     2880
tetgettete tteaattatt teagettett tagaataatt eaageeacaa acettggaae
                                                                     2940
tttctagagc actgaacccc aggcaacttg taggtctccc ttgatggagg tttcatccag
                                                                     3000
gggtgcacag ttttggaaag aagaaaacag agctataatc cactgcgttt ccccaaccca
                                                                     3060
aaaagaagaa tttgttgtga aacgcttctt tttccacttt gctggtgaag gagcccggtg
                                                                     3120
gtaggcatac atccacaggc tgatgcaaga tg
                                                                     3152
```

```
<210> 5780
<211> 878
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (752)...(713)
<223> similar to gi5732934 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5780
tttttttttt ttatgagttg gaatcaactt tattgatacc tgagaaaaag ggcaggaaaa
                                                                       60
atattectee tgaccaggtg geetgteece tgaggeeaga teattetete geeteteeet
                                                                      120
taagccctgg gtcatttggg acctcactgg ccagcaccca gaggctgaag acatccacag.
                                                                      180
ccagagectg ggaagecaga eccagagaec aggagaggga atgtetacag egtggeteet
                                                                      240
                                                                      300
gaggtcaggg ccaaggtcag cgtgggaccc tcatcggtca agggccagcg cctcttggat
                                                                      360
cactgtccgg agtccgatgg aaaacagctc ctcccatggt tcccggatcc aggcaagcag
                                                                      420
ggetgteage tgeteetgae acaccaeag gagtgeecaa aageteteea geegggacae
ctcatcgtag aagagcagcc gcaagtcctc aggggctgag cggtagagca gcacggagct
                                                                      480
caggetgetg agtggetget getecetgae aegeacagea gggeeeggee eegagggagg
                                                                      540
cacettetea qaqqettege cagatgetge tggaggagag ggetetgeeg gggaceetge
                                                                      600
agcatectea tetaacagga acagggtgga eggagteage aacagggata egaggeaggt
                                                                      660
ggaagggcct gcagggaaag aggcatccag tgtggaaggt catggagggg cccagatccc
                                                                      720
tggggccagc gtcccagtgc tgctggggag aagaggtgtg aaccacactc tgaggtgggt
                                                                      780
cacaaagcag cctgtgcccc tggggccaag accetecett teccaagete catgaatete
                                                                      840
tactctggaa tacctctgcc tcctgggaat tccaccgc
                                                                      878
```

```
<210> 5781
<211> 892
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(893)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (433)...(688)
<223> similar to gil345538 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5781
aaccttatta ttactgaagt cgccttgtta cacacaaaca tctacagtgc ctcctggcca 60
ctccttctgg acttttcttt cctagcccag gtcaaagtgg gccttcggga ggaccctgga 120
```

```
qqaqaaqccc cctcctcttc acttccaccc tctctcttcc acccctggaa gtcagctttc
                                                                      180
tgacctcaga atcccagcta tcttctggac tcaggtgaca agtcacctaa gtgacagatc
                                                                      240
cagcatgcac tttatgacca tcactctgct cctcctgcat cagcgcccca cccaacagag
                                                                      300
ccqaccaqqc tgggaacacc gagaccgaga gcgcgtggct gtgtctacaa aggcctcctc
                                                                      360
tttgagggag acacgcgagg cacgggtggg gcgatgagac aggatcggcc ggtccttgac
                                                                      420
agtetetgaa getgggagaa catgaceeca tgeteteetg ttggagteae cacetetttg
                                                                      480
ccaacagcca ccaaacctcc acctccaatt aagctccacc cccatgtccc cactgccctc
                                                                      540
eggacatetg tteageacce ecetegacet ggeeaagget ecaegeaceg ecetggttte
                                                                      600
                                                                      660
ecgetetgee cageceeeeg etgaagtete taatgggtte tteegattee acetgteeaa
ggtaaaaccc tgaggttgtc cctcctccgc ggcacctcca ggtatctggt tgctcaggct
                                                                      720
gaaatgtttc ccaaggccct ggctcctctt ctttccaaac cccgaaggca gctgattagc
                                                                      780
aaattttgac tetaacetca aaacatgtte cagaatteag ceacattete eccaetteee
                                                                      840
cgcctggccc tgggccccgc tattccatct caatctctgc nccggcgcgc gg
                                                                      892
```

```
<210> 5782
<211> 1207
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (282)...(1125)
<223> similar to gi5732634 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5782
ggaggcagga ggtcgggctg gggaggtgca catagtgatg ttaacttttt cccgtgtgta
                                                                       60
aatatggaca geegaagggt egtgtaaatg ttetgeaaaa gtgggtetat acagagtgaa
                                                                      120
agctatttat tttgtgcaga gaaaaaagtc tggagggatg gaaccttcag ggtttattca
                                                                      180
tatttaagat gtagettitt gttgttteag geattatgta taaageaaeg attattttat
                                                                      240
ggaccaagtt ttcatgtaac tgttgcagtg aaagtgcaat atctgacccc cctgctccca
                                                                      300
geaggaagtt gettggeeeg acaateaeag ceeetgteag gggeeetgtg geeagtgeet
                                                                      360
cetectetet tggececace ttateetgte ttgeetgetg cetgggagae cagecateca
                                                                      420
gagaagcacc tggaagagtc tcgggccctc ctgcaataaa ggccgggagg ccctgtgggc
                                                                      480
agtgggetea geeteteece aggggggeag etececacg geteeteact eccegeetge
                                                                      540
                                                                      600
ctgeccagec gecagecatg ccaaggacaa cagcaatagt cccctggggc teteccageg
gccctcagcc atagatggca aggtgggcag cctgccccc catgggaaqt ctcttctqta
                                                                      660
tecaggietg ettlecacet ceetteagat teetttigge acatteteet ettgaggaag
                                                                      720
taccagtett tetgaaacta agagagggag ggeagegtee tttaaaaata eeaaaaatgt
                                                                      780
ttacagagtt gggtgctgag ctgcagggct caggcctgac cagtcataac caaagggtga
                                                                      840
ggcaggcett getgaetgee acceeccagg cetgttagaa tagaageett agteecaete
                                                                      900
ccaccacacc cccaegeeee accaectgee ttetetttga tttetaaaga gggggtteag
                                                                      960
cagagacccc ccacccctcc ctggctcggt ctgagtccca ctgcccaccc catcacagcc
                                                                     1020
tteaegtete agecectece gtetggtetg teegtgtgee gtetgtttet etgggeeatg
                                                                     1080
tgtgagcagt gtccccatct ccccatccgt ccctgctgtc cccgcatcat tgggcctgag
                                                                     1140
tgtgctctgt atacaacgtc atgtctgtta caccaattaa agaagcggga aggcttcaaa
                                                                     1200
aaaaaaa
                                                                     1207
```

```
<210> 5783
<211> 2131
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (395)...(1798)

<223> similar to gi483843 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5783 ttttttttta caaagaaggt ataactttaa taaccctatt tacagataag aaaaccaaga 60 ctcagaagtt aaatggaaag gtgaggtctc tgaactaatc cagactctcc catgaggttc 120 ctttggcaag tcctgggctt ctgtcctcat ctgcaaaatc gaaagcattc ctgaggtttc 180 ttccagetet geateateag agttgggaag ceegeeteea ageeeggaag accegeetee 240 tctgtaaggt taaaggagga agaggcagag attggaggtt caggcagtga cgtaacttgc 300 tgccttaggt ggccttccgc tctggcggct gtcgcgacgg gggttcaggg aatatttact 360 gggcctctcc gctccctctg ctcttggagg tgccatgagg tcagttagct acgtgcagcg 420 cgtggcgctg gagttcagcg ggagcctctt cccgcacgca atctgcctcg gagacgttga 480 taacgatacg ttaaatgaac tggtggtggg agacaccagc gggaaggtgt ctgtgtataa 540 aaatgatgac agteggeeat ggeteaeetg tteetgeeag ggaatgetga ettgegttgg 600 ggttggagac gtgtgtaata aaggaaagaa cctgttggtg gcagtgagtg ctgaaggctg 660 gtttcatttg tttgacctga cacctgccaa ggtgttggat gcttctgggc accacgagac 720 actaategga gaggageage gteeagtett caageageae atecetgeea acaceaaggt 780 catgctgatc agcgacatcg atggagatgg gtgtcgtgag ctggtggtgg gctacacaga 840 ccgtgtggtg cgagctttcc gctgggagga gctaggtgag ggtcctgaac atctgacagg 900 gcagctggtg teceteaaga aatggatget ggagggteag gtggaeagee teteagtgae 960 tetggggeea etgggtette etgaactgat ggtgteteag eeaggttgtg egtatgeaat 1020 totactgtgt acctggaaaa aggacactgg gtcccctcct gcctctgaag ggcccacgga 1080 tggtagtagg gagaccccag ctgcccgaga cgtggtgctg caccagacat ctggccgtat 1140 ccacaacaag aatgtctcca ctcacctaat tggcaacatc aaacaaggcc acggcactga 1200 gagtagtggc tetggcetet ttgccetgtg caccetggat gggacaetga agetcatgga 1260 agaaatggaa gaagcagaca agctgctgtg gtcagtgcag gtggatcacc agctctttgc 1320 cctggagaaa ctggatgtca ccggcaacgg gcatgaggag gtagttgcat gcgcctggga 1380 tggacagaca tatatcattg atcacaaccg caccgtcgtc cgcttccaag tggatgaaaa 1440 tateegtgee ttetgtgeag geetgtaege etgeaaagag ggeegeaaca geecetgeet 1500 cgtatatgtc actttcaacc agaagatcta tgtgtactgg gaggtgcagc tggagcggat 1560 ggagtetace aatetggtga aactgetgga gaccaageeg gagtaceaea geetgetgea 1620 ggagetggge gtggateetg acgaeeteee tgtgaetegt geeetgette accaaacget 1680 ctaccatcca gaccagccac cacagtgtgc tccctcaagc ctccaggatc ccacctagct 1740 gtacttgcct catagctggt gaaggattet tetgaaceee caecetacee cetaaaggeg 1800 tetttggate acaetgegeg getgetgget ecateacaaa acaatgaagg aggaagtggg 1860 acgcagagag aaacgcacat ggggagaacg ccacgtgaag gctgaggtcg ggataatgca 1920 tetgeaagee aaggaacace taagaggace agcaaaceae cagaageeag gggagaggeg 1980 tggaacagac cetgeettae agetgteaga aggaaceaae cetgeeaaca cetteetgtt 2040 gtactttcag cttccagaac tgtgcctgca gggcttgaga gaaatggaga caaagaaggc · 2100 cgtgggcagg aggccaagag aagcccagca g

```
<210> 5784
<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1121)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1078)...(224)
<223> similar to gi6002599 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5784
tttttttttt ttaagagaaa aggettttta atatgaaaac tatgtatttg ggeacaaaaa
                                                                       60
tgcaacacac agtaagaaac catattctat caattatgat attctgtaat ctaagaacac
                                                                      120
agaaagtttt gttattagga aatgccaaga ggaaaaagaa ctctgtaaag tcctattcaa
                                                                      180
tttactttgt tagggaaaag gatgtttatt tggcttttgt cacagttcca tcatggctta
                                                                      240
ctettettgt aagtteaget teaatgeete getagttete agetttgett etteaattet
                                                                      300
tcactttgag caatgagacg gatttcggca ttaagtctaa ataggactcc aattttttcc
                                                                      360
ttcaaaggta tagtctgttg ctttaatctt ggccagtttt ctctgatgag tgctactaag
                                                                      420
gactggatng agacagagaa agcatecetg geetetggee gaaagttget eeeetgeage
                                                                      480
ctggatccca aatctgaatt cctctgactt ggcttttaga aagtcccatg ttctgacgac
                                                                      540
gattatcaac tttggcccct ttctgtagac agatgcaact ctgctttctt gacatcctct
                                                                      600
tgtagacatt tttctaatac taaagttgca gttaaatttt tttcaagttt ttccaqttca
                                                                      660
atcttgattt cttcactttt ggatttggta cgaaagagat cagaqqtcaa atcattcact
                                                                      720
gcagggataa aactagctag cgaggtatcc tttgtttcaa gggccaccgc actgtcaacc
                                                                      780
aaagcattca gatacctgga accagtgcta gagagattgg cgggggaaaa attcacactc
                                                                      840
tecatgagaa ggtettgaag ataettgget tetgaetegt atteaettge tttetgette
                                                                      900
aagtcctcta ttaccaggta gacatccctg tcccggaccc tgttgcgttc tgaaaggtga
                                                                      960
tgtaaaatet etgtggteeg tgggtteace teataetgtg gaataggatg ateteeaaat
                                                                     1020
attittitta accacgeage aaccigegit teleteleet eeligeggele calageligeg
                                                                     1080
gétecegéea etttactagg aactectage gggagatgeg
                                                                     1120
```

```
<210> 5785
<211> 3022
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2574)...(1107)
<223> similar to gi30821 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5785 tttttttttt ttcaggagcc aaggaagttt atttactcta ctgggtgaca ggagggcaga 60 gtgctccaga ggagacccag atacatcaac caaggacttc cctgagattt ggctttgctc 120 ttccaggcct gcacatgctg cgtgatgaaa tgaggcctgc ctagacatct gtgagggcct 180 cgagggetge tgeetegaet ttetecetag etaagteeae eegteeaggg acaeageeag 240 ggcactgctc tgtgctgact tccactgcag ccaagggtca aaatgaagca tctgcggagg 300 ccaggactcc ttggcatcgg acacagtcag gggaaaagcc accctgactc tgcaggacag 360 agggtctagg gtcatttggc aggagaacac tggtgtgcca agggaagcga gcatgatttc 420 tggagtggac tacatgcatg gtctggagtt cagtaaactg gaaagtttca cccccaagtc 480 ttaatttaat caaaattgct gaactctgtt caatcttcat tgttaaaagc agctttaaag 540 ctgggtgatt tcttagtcaa atgtataacg aagcttttac ttatcaattt ctttttggga 600 gggggcatgg gctgaaatac atcttgtgct caataaacct ccccacatca atatttcaaa 660 gcactttcta ggttacaata atgacatttc aattccatat acgcatacat agaatatata 720 tttttaaaca gagtgggtct taagagtata cttggaaccc tcggagtcct ccatggacaa 780 gaacagggtg gcccatggac ttccagccaa aggctccact gtggggctgc tttggggaga 840 gactcacage tggacttete tateegacea tgeaatgtta geeageacea attacecaea 900 atgetttgee cataagagat agaaataatg gaacteacag gaagaaacag tattgataac 960 atacacaggc ttacagaggc caggcccagt aattaccatg agacagaagc ctacaggtgg 1020 cggtgctttg actgggctgg gattattgat acatttactg attacatcac ttcttttata 1080 aggcatatgt taaaacgcag tgctacttga aagtcgaaag gcacagcttt ccgggggagt 1140 catggaacte ettteactat eteateegtg accteetttg egeeggggee tggttgetet 1200 tgcgatcaag gggctgcaga acctcctatg agtgcccttc ttgaagctca ccaggtgagc 1260 ateggeteeg etggtgtaaa teetteeetg atetggeteg aacetggteg teggteeteg 1320 gagaagaagg tcaggtacct ggagagcaca gtcaacatca cagttgccgc ccaaactggc 1380 tgtggtccct cgatgggttc tgtccctcca gaaaacgcat gcttattgga ccttgggttt 1440 gacctgtttg gecetgtegg tgaggaagat ggaggagttg gggtegetgg cacteatttt 1500 ggtctgggcg ccctgcaggg ctgggaagaa ggtggagtgc aacagggctg gtttaggata 1560 geegateeet gggggegaeg teeettigtea ttetaaagta aggateeetig gteaatggea 1620 catgggataa ggcaactgga tatccgtcct gtctcggaag atctgtggga aatgagttgc 1680 tgaaaggagg gagcagcctg gatggcagga aaacttgatc tttcccaatg gaagtcgctg 1740 tragtgaage regaraatge ettteacttg ggttgaaagg tacatgettt ttgaatette 1800 accacatttt ttgtagaaac ctgagctcat ccccatgtag tcccaggtca gagaatatga 1860 aagtettgtt gatgteaaag egacaggega tgatgteett ggeattetee acageatage 1920 tataggeetg gtecagggte aggteettee acagatactt etegteatee gteatetgga 1980 tgaccaaggg cacgttaaat acatcctgga gccactttgt gaaaaataaa tggaatgagg 2040 tgacctacat gcattgcttc aagaagaagg gccccggccc gtgtacagat aaaaatggct 2100 tettaatett cataggeaat caagaacetg atteatatet etgtgtgaga agaagatgee 2160 totgogoagg gaagtggtgt ggtotttggo ogggtggoto tototattog ggtttattag 2220 ctctttgtca attttactac ttccaaaacc gaaccaatgg agcttaaccg tagtctaatg 2280 ecettitigea etgettigtet gtaetigteea tiggiteeaea aaateetett eagettetigt 2340 ggcatctggg ccatgattac tggtaggtgc tgggttccct ggaggacagt cagccttgta 2400 atcctccccc gcggcagctt tgtagctcat ttttaatgac accaacatct ttactgcaga 2460 atcaatttea teetttgaeg cattteeege tttgagggae ettaegaget eecettgtgt 🔌 2520 ggcgatgctg ttgaacagct ccagcagaga tgcgggctca ctgttgggca tgtttgctat 2580 ctctcaggaa ctacgttcac agccggcctg aggtcagagg atttgttcag cagacgagtc 2640 aagaccaggt tgtggaagac actgcagagg tggccactgg tcacgctggg cagttgagct 2700 gctgagagtg ccctgcccag ccagaaatgg tctttaatac tcttcccctc tttctttcag 2760 tttcccttct gaaaaaagat gcttttgtct ttcgttctcc ccaccctgca ttcagctaag 2820 ggtttettat aaateaceca gatteteaga aacaettgag etettgaeca acettettga 2880 tgagactgtc caatcagggg tgggttgcct ggggggccag gttgagacca atgaaaccct 2940 cttgagaatc gagccattag ctggtcattg catcagccac ccctcacccc ccgctggacg 3000 aaatcgtcga cccgggaatt cc 3022

```
<210> 5786
<211> 1829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1417)...(1828)

<223> similar to gi4191327 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5786
60
aaaatttaat tcaaatcaac ttttaaaata atttttcagc ttagtaccat acagttgttg
                                                                    120
tocagtattt ttagaaaagt aaagtottag catgaaactt cottaaccta ttttagooto
                                                                    180
atgettttga etaaaataga ettaaaaaet gaattaaatt tttatataea ettatattta
                                                                    240
attaatetaa agagataget tacatataga aattaagtaa aggggagate tgtattttea
                                                                    300
ttcaagatgt taaaggctag cacagaaatt ttctaggcat taaatcattg cttattacat
                                                                    360
aatgttttta atagtttgct ttgatatcag tattgtgaat aacggagcaa attcagccat
                                                                    420
attagttctg ttgacttcat gctcataatt ttgagaagtc caggcgtaaa ctaaaactct
                                                                    480
tttggtgtac ttgaatattc tttgtttgtt gatgtaaaat atgtaatctc tgattttata
                                                                    540
gttaacaata aaaataaaat tttaggtgag tgaaagcagt gatttaaatt taacagtgtc
                                                                    600
ctcttgaaaa accttaatca cagttaagtg atggcatggg caatgaattt taatcatatt
                                                                    660
taggaataaa atactagata ttagtgtata acaattagat atatgttaat tgagcactac
                                                                    720
aaageetgaa agettaacaa agtggggeta taactagtaa ttttttggta aaaatatagt
                                                                    780
gatettitte taeagggtat tattataagg gacaaattat agttgtaaat tagattaatg
                                                                    840
aattttgtga gttttaaagt ttgtacgaac catgtctccc ttgtgtcata ttttccaata
                                                                    900
atataattac ctaacaatga cagaattata cattttccct ttaattctct aagcattgag
                                                                    960
taaacagaaa aatataggga tgaaatacac acatgccaac attcaaaact ttgtactaac
                                                                   1020
tagaaacaaa aatagaaggg gatttataaa ggaaaatgat ggagacattt tagagaaatt
                                                                   1080
aagtataaat cgcaacattc tgttttcttg gatgtattct gggtagcttc tagttacttg
                                                                   1140
taaacaaagt attcattgtt tttgtaataa agtgataatg ttttgtttta tagttgagtg
                                                                   1200
getttagggt aatttaatea eetggaaagt gatatttttt taattaeett ttgttaetaa
                                                                   1260
atcttatcta atttaaaata ctatgttttg aaagtatata tettgtatag ttatetttt
                                                                   1320
atatgaaaat gaactetaat acatatettt ettteagtgt teatateaea aageteaatt
                                                                   1380
aaatggteet ggaaaaaaaa aategtteea tgttgtteea ggteeegtte aagaagttet
                                                                   1440
tecagttege agreaagate tegttecagt tecagagaac greegagate tegtgggteg
aaatcaagat ccagctccag gtcccacagg ggctcttctt ccccacgaaa aagatcttat
                                                                   1560
tcaagttcat catcttctcc tgagaggaac agaaagagaa gtcgttctag atcttcttca
                                                                   1620
tetggtgate geaaaaaaag acgaacaaga teaeggteae eegaaageea ggtgattggt
                                                                   1680
gaaaacacta aacaaccetg ageccaggge caaccectac ggaacaccac tactttacce
                                                                   1740
agacgecaca ggteateate tggateatee cattetggtt ecegtteaag tteaaaaaaag
                                                                   1800
aaataatgta ttaaaattta catcttaaa
                                                                   1829
```

```
<210> 5787
<211> 1327
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1085)...(884)
<223> similar to gi288145 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5787
cccacgcgtc cgcggacgcg tggggaaaga aggcgccgca gctaagccca ggtctctcct
                                                                       60
ccgcaggttc cagctccttt cctggagcgt gtgtgggggc aacaaggacc catgggttca
                                                                      120
                                                                      180
ggaattgatg agctgtcttg atctcaaaga atgtggacat gcttactcgg ggattgtggc
ccaccagaag catttacttc ctaccagccc cccaatttct caggcctcag agggggcatc
                                                                      240
ttcagatatc cacacccctg cccagatgct cctgtccacc ttgcagtcca ctcagcgccc
                                                                      300
caccetecca gtaggateae tgteetegga caaagagete actegteeea atgaaaceae
                                                                      360
cattcaçact gegggecaca gtetggcage tgggeetgag getggggaga accagaagea
                                                                      420
gccggaaaaa aatgctggtc ccacagccag gacatcagcc acagtgccgg tcctgtgcct
                                                                      480
cctggccatc atcttcatcc tcaccgcagc cctttcctat gtgctgtgca agaggaggag
                                                                      540
ggggcagtca ccgcagtcct ctccagatct gccggttcat tatatacctg tggcacctga
                                                                      600
ctctaatacc tgagccaaga atggaagctt gtgaggagac ggactctatg ttgcccaggc
                                                                      660
tgttatggaa ctcctgagtc aagtgatect cccaccttgg cctctgaagg tgcgaggatt
                                                                      720
ataggegtea cetaceacat ceagectaca egtatttgtt aatatetaac ataggaetaa
                                                                      780
ccagccactg ccctctctta ggcccctcat ttaaaaacgg ttatactata aaatctgctt
                                                                      840
ttcacactgg gtgataataa cttggacaaa ttctatgtgt attttgtttt gttttgcttt
                                                                      900
getttgtttt gagaeggagt etegetetgt cateeagget ggagtgeagt ggeatgatet
                                                                      960
eggeteactg caacecccat eteccaggtt caagegatte teectggeet ectectgagt
                                                                     1020
aagctgggac tacaggtgct caccaccaca cccggctaat tttttgtatt tttagtagag
                                                                     1080
atggggcgct gagtggactg caaggtggac aggagcatct gggcaggggt gtggatatct
                                                                     1140
gaagatgccc cctctgaggc ctgagaaatt ggggggctgg taggaagtaa atgcttctgg
                                                                     1200
tgggccacaa tccccgagta agcatgtcca cattctttga gatcaagaca gctcatcaat
                                                                     1260
tectgaacee atgggteett gttgeeteea cacaegetee aggaaaggag etggaacetg
                                                                     1320
cggagga
                                                                     1327
```

```
<210> 5788
<211> 2029
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1944)...(1946)
<223> similar to gi868213 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5788

tttgatggaa aaatggaatt ctcagttcat ttgaagaata cagattagca attaaaaaat 60
acagcagtat ctcaggaaat aaacattatt ctcattttac aaaaaagtgt atgtgaactt 120
taaaaaaatc tacactacaa tatgaattga tattatctct gggtagaatg ctaacaattt 180
```

```
tattttctcc tttactgtat tcactaaatg tttcacatta aatgttgtat tacctttgaa
                                                                      240
atcagaagat acattgtcta aaactgatac atcaaggaaa tagttgtata aggcatatta
                                                                      300
cctaaacaca gagggttacc aacaggaaat taaaagtggg ttaaaaatga ctcctggggg
                                                                      360
gaactgtaag gaagagggaa gggtgaaggg gaaggaaatg ggttgctttc cattctaaat
                                                                      420
cttcacacaa tctattctta aaatcagaca agggctgtgg taaatttttt caattattaa
                                                                      480
aaaaaattat ttettetaat aggaatagge etttgagaac eetattaatt gtaataggtt
                                                                      540
tcaattcagt tagtcactca agtattataa aatgcaactg gatttacaga aataatttcc
                                                                      600
tacctacact gacagtatat ttaaactaaa aaaaaagcat acaatgtaca aacaaattta
                                                                      660
tttacaaaaa ttacaattac aaactgtaca aattgagaca atttcccatg cctccaacag
                                                                      720
aagccaagag cctttactgt caaatggcag tttttgttac ttttaaatga cacacaaaaa
                                                                      780
gaaatatgat geetatteag teatecaetg ceagtttaaa aatgetttte taaataatte
                                                                      840
caagaageet attagtgata tgtatatgga taattteeet caactetatt tetagaatgg
                                                                      900
ctatgtacaa atccagcaaa actggaacag aacagggtaa gaaagcacat agcaactgct
                                                                      960
ttttcaacag taaattttga ctattcccct aaatatctac ctagtggctt aaaactaaaa
                                                                     1020
ctatggtctt tggctttaaa aagaaagtca aaaaattttg acttttaatg actgcacaat
                                                                     1080
totaccaaag ccagtgttta cctgggtatt ttttgtcacc tgtagtttac atttccctgc
                                                                     1140
tactgttaaa gaaacagaat tctacagtat tcaattctgt atattgtctt ttaaggtttt
                                                                     1200
tcaatcagac tcactactac tgcttgagga gtccgttgac ataatctcta catcatcttc
                                                                     1260
attttcttta ttatgeccag gaggttccaa caaaaagtca ctactatgat ttggtggtaa
                                                                     1320
catatteate gacatgteat ttgactgeea tggatactgt ggageaagga catetggeaa
                                                                     1380
tetteetget geaagtgeat eteetggtaa atggeeatte acgeeattag tggaaggatt
                                                                     1440
gttcatctga cccagtaacc cacttctcat ctctaaatca gttgggtagg gtctccgggg
                                                                     1500
gtcccctgga acccaggtca gtggagcaca tacagcatta cttgcactga tcctatqtqc
                                                                     1560
atacttaatt atttcttcag aggagatage accttttctt getttttcta ttgacttgag
                                                                     1620
tttctccttc gcttggtaaa cagctgttgc cagtatttgt tctgcttcct ttaqctqttt
                                                                     1680
ttgtagctgc tgaatatcac tgtctctctt ctctacttct ttttctaaaa cttgcatttc
                                                                     1740
atgatgaatt tttccctgat taagtgccaa tttcattagt tcttgaaatt ccccatctcg
                                                                     1800
gtgaattaac aactccagga cctgqttttc ctctccaqcc tqtaacaact tttqqtttct
                                                                     1860
tgaaattgcc agcatttcta taagttccct agacaggacc tccaagtcct caagcgcaga
                                                                     1920
cagcagcege tetegtgtge tgttaccace egecactece aaacegeete ecagcegete
                                                                     1980.
cttctccttc tcaccactcg aagacgcagc cattttcccc agagtcccg
```

```
<210> 5789
<211> 3356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3357)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2848)...(1116)
<223> similar to gi5748565 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5789
tttttttttt ttccagttct aaaaccaaat ctttattctc tagtttgaaa aggaggggta
```

```
aatggttgtt ctgtttagtt ccagagaaca gaacaaggcc caataggtag aaattatagg
                                                                     120
aaagcagaat tcattcatta taaggaagga tttctaacaa ttagaatttc taacaattag
                                                                     180
aatcatccag ggcctcagga ggtgcggaag ttcctgtcac ctaagtgctc aagcagaggc
                                                                     240
caggtgtcca tatgctagaa atggagaaaa ggaaactcac cagcaacttc ccctcagctg
                                                                     300
gccctccatc accaatgcgg cagtccttgc cgtgacatgc tgagctctgg aaggagcgaa
                                                                     360
ggaggggctg cggtgttcag acaagagcct ggacacagtg ctgctgacag ccaggggagg
                                                                     420
ctctcagcgc tgggaggggc gacagataaa gcgagacaga ccaaggagta aatgccttgg
                                                                     480
ggtctgctct ttgggaagga agaggatgga agtactaaca gcagacgggt ctctccaagt
                                                                     540
ctgggtgcct acgcaggggg caggtgggag gggaagggag aggtaagagt ggcttcgctt
                                                                     600
cacctcttgc tgctggcaaa ggcccaagtg ctgtctaaca aggccagcag gttctccaag
                                                                     660
ctgtatctag cccagagcat tcatttacag gactctacca cgcctgcttc caaaaatgat
                                                                     720
                                                                     780
cttaagtaac ttacagtaaa agacaggggc attaaggcgt taataccaga ggatggaggg
tetteettte caetggtgge teetetagee agagggetet aaggggegga tgetattget
                                                                     840
gettttecag ggcacagggc agtcaggacg gagcettagc acacaccage tggaggcegg
                                                                     900
egtecetgeg ettggaagtg ggttecetgg ceaceggggt tgaeetetet egetageagg
                                                                     960
geocacceag eteacteece gegtetteea teceetetag gatteecatt gteecetaet
                                                                    1020
ccagcactag gcaggcaccc ccagcccact gcgactccca ccacgaagga ccccagccct
                                                                    1080
ctctcagcca acacggcccc gcccaccgtc tcagacatcg tgcttcttct ggtgggccag
                                                                    1140
gagtetetee tegtegtega aggtetggee acagatggea cageagaagg egeegteeeg
                                                                    1200
gatgtggctc ttgcggtggg tgatgaggtt ggacttctgg ctgaagctgc ggtcgcagtc
                                                                    1260
gggacaggeg tagggeeget egecegtgtg gatgegeegg tgegacaceg aggttggact
                                                                    1320
                                                                    1380
tetggetgaa ggetttgegg cagtegggge agaegtaggg etteleggee ggtgtggeaa
teggeeggtg egeegeeagg tagggtttgt ggeggaagge ettgeegeag tegggaeaca
                                                                    1440
cgaaagggcc gaatcggggg gcgttgggtt ccgccgaatt gcggccgcca gattggcttg
                                                                    1500
ccettggaag aaaacgccgg ccgcacttcc tcgcaaggcg aaagggccgc tcgccggagt
                                                                    1560
geacgegega gtgegeeace aggtgegtet tettgeegaa gttetteeeg eacteggege
                                                                    1620
aggtgaaggg cegeteeeeg gtgtgetgee getggtggge cegeaggaag egeteeagee
                                                                    1680
ggaageteet geegeagteg tegeagetgt agagggaggg gggggetteg ategggteet
                                                                    1740
gegggtgete tggegggge cetggeggeg geteetggge eggttteaga ggtacegeeg
                                                                    1800
gggtgggctc ggccgcggac tcctgggggc cggctggcag ctgggggctc cccgggccgg
                                                                    1860
gggcggcctg ggccgacccc teggateget tgtgaatett getgtgagac agcaggttgg
                                                                    1920
gtttgtgccg gaagcggcgg ccgcactctt tgcacgggta gggctgtctc gccgtgtgtg
                                                                    1980
tgatgcgccg gtgtcgaagt cagatagggc ttattggtaa agcgcttctc cgcactcgcg
                                                                    2040
getacttggt ggggtegete gecegatgtg cacgeggegt gtgagengat caagttggge
                                                                    2100
tttgtgccgg aagcgcttgc cacaacaggc acacatggaa ggggcggtcg acggcatctc
                                                                    2160
caccggngcc ggggggcgtg tcacccgtgg gggggcccct gggccggggg ccccagaaga
                                                                    2220
cettggetgg egggeetege teetagggee gteggetaac gtgcaceege ttgtgggcaa
                                                                    2280
ctttagctgg tcccacgtgg gcaaaatgct ccggccacag ttgccgcata tgaagggccg
                                                                    2340
gggccctctc gggcgggaag ggtggcaccg ccgcaggatt gagctcgaag ctgcctttcg
                                                                    2400
tcgccagaaa gcgtctctcg ccattttggg acaagcgaat gggccggctt ttgcagctga
                                                                    2460
atgggcccgc agatgcagaa ccagggccac ccagcctcgg aagctctgcc cacagaggtg
                                                                   2520
gcaggcaaag ccccagtctg gggtggcagc agcatggacc tggcggtgca gtgctaagaa
                                                                    2580
2640
caccggcggg tgtgaagcca cagaggccac ccagccaggg aagtgccttc gacagtgggc
                                                                    2700
acagegatgg geeetgeetg gggettggge accagactag ggeeactgae gtgeettgtt
                                                                    2760
gcctcagccc gcgggactcc ttccccaggg tctggggtga ctcctgggag ggcccagaaa
                                                                    2820
ggagtegggg etgggeeggg eccatggeea gggggeeeet geaacgaegt tecageateg
                                                                    2880
gttetteete tgeaagaaaa atgtggenae tgeteeetae agtgeettna tgetgeeete
                                                                    2940
tecetgtgte tgetgtttee tatgecacat eegagetgea cageaactet.gagaagetgg
                                                                    3000
acaaacagac actgagctcc cctggagact gcagagctgg ggatgaggct ttttccagct
                                                                    3060
cctcttgggg atgttcctgg ggatacttcc gcggctgcag cgcctgcttc ggcccacact
                                                                    3120
ccggtagccc ccaggtgtta gagaaaactg cagtaataaa gacacccta tccccatggc
                                                                    3180
agageteaga cetetgaetg cagagaggee ageettacet etgeggeggg etgtgeaggg
                                                                    3240
acgoggogoc ogtocatgga gooogaaggo oggootocgo ggoocactot ogotocoogo
                                                                   3300
cccgccgcgg cgacagcggc aggttcgagc ctcgtgccaa gcttggcgta atgagt
                                                                    3356
```

```
<210> 5790
<211> 2319
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2082)...(514)
<223> similar to gi5764665 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5790
ttttttttt ttttaaagtg caaatggctt ttattgaggg cctactgtgt gctgggcaac
                                                                       60
atgtetgeaa gggteetget ttaceteeet gtactttgea eeggeeaggg aggagggtge
                                                                      120
tggggagacc caaacatcaa gctgggggag ggtgctgagg tggaggtaga agggggcaga
                                                                      180
ggggcccctc agetgagtec ttagggaggg aagggatect ggggtetgee cagettgaaa
                                                                      240
cagaagetgg gggccacaag gccetgaate aggecaggca gggtacaggg gcctgggagt
                                                                      300
cetgeteett tgetgtgaga cetttaggga atgggateea tetetgagtg gttteteeeg
                                                                      360
atgaaagaca ggtccagagg gcagagtggc catgcccaag gtggtggcca ggtctgacag
                                                                      420
gatetgeagt ceetgeeaac aaceteetee tetgetetet gggeagtagt ggeetgetee
                                                                      480
tggacactgc tttgcagtca tcacctggac ctagagctca tctcggggct ggggttggag
                                                                      540
gctgtgcccg ctgctgccag tcaggtccag gcgggggctg cgcagggtct tttgggagcc
                                                                      600
getecagetg atgaggegge egetgteate ateccatgga gaggatgtet cegtgteact
                                                                      660
gagccacteg gegteeeegg catagtgggt aggggcageg agcagggget gggeggagaa
                                                                      720
ggccaccagg tcccgtggcc agaagtgtgc cttgtactgc tcgttggggt gctggtcgaa
                                                                      780
catgatgggc aggaactegt ceaegggeag catgeggege agaggetgtg aggeeageag
                                                                      840
cttgcgggca cccgccagac gcagggcata ggccagcgtc cagtaggagt acccagccac
                                                                      900
caccaggece ggcagecect ecaeggeegt efecttetea gggtteacet getteegtee
                                                                      960
gaggtagate aggteccaag acagtttete tgeetecaea tectecatea geeegeteca
                                                                     1020
geogeocet gaagttgete teaaagegea egteatteet teaaacaace aggaeeeegg
                                                                     1080
ggccaggccc cctgggaaac cacctettee ccagatggag taatggtetg aggaaagcaa
                                                                     1140
geceaectee getettigte agagtgegge eegagtaagg gteetggtag eeegggagea
                                                                     1200
ggtctacgcc gaggttcctg atggcactgc tgttgagcat ccagccatcc acagcgtcca
                                                                     1260
ccaccetece agagatetee ateteccaga gegaggegag catgegttee egaeggteag
                                                                     1320
geotgegage caggetgatg acaaagacet egteaaacec tatettgetg ggeotettag
                                                                     1380
agggccgagt cacatgagct gaggcctgca tgcgggggcc gtccactagt gcttctaaga
                                                                     1440
teaggtggat gaagttgace etetegtett ceageceetg gtgggaftte aceggeacat
                                                                     1500
teatgtacce ataacggtge teattgeaca egtggaegga gaceceagca geetggeagg
                                                                     1560
cataggcgaa gacgatgatg tcgtcgaaag gccaagtgta gttgggatgt ggcgggtaga
                                                                     1620
aagcaagctg gtctgcccct tcagcccgca gggatgcaag gaaggtggag tggaccatgg
                                                                     168Ó
ggacacggaa gcagccccgg cgctggcggt tcttggtggg gaagtactcg gctgtgcggc
                                                                     1740
ggtagtagcc ctggggggtg atcccacacc agaagttgga gtagtaggtc tgggagtcca
                                                                     1800
gcattggggc caccactgga agcccctgcc ccatgagaag ccgcagagtc tgattgttgg
                                                                     1860
tcagaatgtt gtctgtgtct gcaaacagga tatagtcggc ccccagttc ctggcaaagg
                                                                     1920
tgagggette etgetteage tecateagaa actggtgeet ttetttggte eagtgettgg
                                                                     1980
gaccetette atetgggtag aacctggget egeceteagg cetecagace acagcageat
                                                                     2040
agteategee cacageegee ageeacteet geageatete tgtggtgttg tecacattgt
                                                                     2100
ggtccgtggc acaccagagg gccatcctgg cccgggggta gtccagccgc tccagagcgc
                                                                     2160
ccaggitagig gggcagcgag tgttcggcat tgcgggccag gatggcaagg accacggcgg
                                                                     2220
grageggega etcegcaacg cocgcagect coagecacgg coccageagg agcagcaget
                                                                     2280
ggagcaacgg cgcggcgcg gcagcgcgca tggcgggcg
                                                                     2319
```

```
<210> 5791
<211> 3679
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (341)...(3349)
<223> similar to gi4529889 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5791
gctgtgtata tggccacata taaaaggtct tttaacttta ttaagctttg ttttctcatc
                                                                     60
tgtaaaatgg aaaagggcct gctctgcatg gttgcagaga tgagtgagtg ttagtgtgct
                                                                    120
tgacactett cetetgagga aatagcacce gtggttgeca gtttgtgget aetggageet
                                                                    180
cacatggcat ttggaggtgt ggctcactac cccacccccg cctggggctc caggctaacc
                                                                    240
catgcaaaac tgtatgtgct ctctgaccct cagtgtgctc cctctcggcc cacagccccc
                                                                    300
ggtccctgag aagcggcccc ctgaaataca gcatttccgc atgagtgatg atgtccactc
                                                                    360
actgggaaag gtgacctcag atctggccaa aaggaggaag ctaacctcag tagggtggcc
                                                                    420
tgtcggagga gttaggttct gcccggcgtt caggagaagt gaccctgacg aaaggggacc
                                                                    480
cogggtccct ggaggagtgg gagacggtgg tgggtgatga cttcagtctc tactatgatt
                                                                    540
cctactctgt ggatgagcgc gtggactccg acagcaagtc tgaagttgaa gctctaactg
                                                                    600
660
aggaagagga agaagaagag gaagatgagg agtcagggaa tcagtcagat aggagtggtt
                                                                    720
ccagtggccg gcgcaaggcc aagaagaaat ggcgaaaaga cagcccatgg gtgaagccgt
                                                                    780
cteggaaaeg gegeaagegg gageeteege gggeeaagga geeaegagga gtgaatggtg
                                                                    840
tgggctcctc_aggccccagt gagtacatgg aggtccctct ggggtccctg gagctgccca
                                                                    900
gcgaggggac cetetecece aaccaegetg gggtgtecaa tgacaeatet tegetggaga
                                                                    960
cagagegagg gtttgaggag ttgcccctgt gcagetgccg catggaggca cccaagattg
                                                                   1020
accgcatcag cgagagggcg gggcacaagt gcatggccac tgagagtgtg gacggagagc
                                                                   1080
tgtcaggctg caatgccgcc atcctcaagc gggagaccat gaggccatcc agccgtgtgg
                                                                   1140
ecetgatggt getetgtgag acceaeegeg eeegeatggt caaacaceae tgetgeeegg
                                                                   1200
gctgcggcta cttctgcacg gcgggcacct tcctggagtg ccaccctgac ttccgtgtgg
                                                                   1260
cccaccgctt ccacaaggcc tgtgtgtctc agctgaatgg gatggtcttc tgtcccact
                                                                   1320
gtggggagga tgcttctgaa gctcaagagg tgaccatccc ccggggtgac ggggtgaccc
                                                                   1380
caccggccgg cactgcagct cctgcacccc cacccctgtc ccaggatgtc cccgggagag
                                                                   1440
cagacactte teageceagt geeeggatge gagggeatgg ggaaceeegg egeeegeeet
                                                                   1500
gegateeect ggetgacace attgacaget cagggeeete cetgaceetg eccaatgggg
                                                                   1560
gctgcctttc agccgtgggg ctgccactgg ggccaggccg ggaggccctg gaaaaggccc
                                                                   1620
tggtcatcca ggagtcagag aggcggaaga agctccgttt ccaccctcgg cagttgtacc
                                                                   1680
tgtccgtgaa gcagggcgag ctgcagaagg tgatcctgat gctgttggac aacctggacc
                                                                   1740
ccaacttcca gagcgaccag cagagcaagc gcacgccct gcatgcagcc gcccagaagg
                                                                   1800
gctccgtgga gatctgccat gtgctgctgc aggctggagc caacataaat gcagtggaca
                                                                   1860
aacagcagcg gacgccactg atggaggccg tggtgaacaa ccacctggag gtagcccgtt
                                                                   1920
acatggtgca gcgtggtggc tgtgtctata gcaaggagga ggacggttcc acctgcctcc
                                                                   1980
accacgcage caaaatcggg aacttggaga tggtcagcct gctgctgage acaggacagg
                                                                   2040
tggacgtcaa cgcccaggac agtggggggt ggacgcccat catctgggct gcagagcaca
                                                                   2100
agcacatega ggtgateege atgetaetga egeggggege egaegteace etcaetgaca
                                                                   2160
acgaggagaa catctgcctg cactgggcct ccttcacggg cagcgccgcc atcgccgaag
                                                                   2220
```

```
teettetgaa tgegegetgt gaeeteeatg etgteaaeta ceatggggae acceeetge
                                                                     2280
acategeage tegggagage taccatgaet gegtgetgtt attectgtea egtggggeea
                                                                     2340
                                                                     2400
accetgaget geggaacaaa gagggggaca cagcatggga cetgacteec gagegeteeg
acgtgtggtt tgcgcttcaa ctcaaccgca agctccgact tggggtggga aatcgggcca
                                                                     2460
teegeacaga gaagateate tgeegggaeg tggetegggg etatgagaae gtgeecatte
                                                                     2520
cctgtgtcaa cggtgtggat ggggagccct gccctgagga ttacaagtac atctcagaga
                                                                     2580
actgcgagac gtccaccatg aacatcgatc gcaacatcac ccacctgcag cactgcacgt
                                                                     2640
gtgtggacga ctgctctagc tccaactgcc tgtgcggcca gctcagcatc cggtgctggt
                                                                     2700
atgăcaagga tgggcgattg ctccaggaat ttaacaagat tgagcctccg ctgattttcg
                                                                     2760
                                                                     2820
agtgtaacca ggcgtgctca tgctggagaa actgcaagaa ccgggtcgta cagagtggca
tcaaggtgcg gctacagctc taccgaacag ccaagatggg ctggggggtc cgcgcctgc
                                                                     2880
agaccatccc acaggggacc ttcatctgcg agtatgtcgg ggagctgatc tctgatgctg
                                                                     2940
aggetgatgt gagagaggat gattettace tettegaett agacaacaag gatggagagg
                                                                     3000
tgtactgcat agatgcccgt tactatggca acatcagccg cttcatcaac cacctgtgtg
                                                                     3060
accecaacat catteeegte egggtettea tgetgeacea agaeetgega ttteeaegea
                                                                     3120
tegeettett eagtteeega gacateegga etggggagga getagggttt gactatggeg
                                                                     3180
accgcttctg ggacatcaaa agcaaatatt tcacctgcca atgtggctct gagaagtgca
                                                                     3240
agcactcage egaagecatt geeetggage agageegtet ggeeegeetg gacceacace
                                                                     3300
etgagetget georgagete ggeteeetge eccétgteaa cacatgagaa eggaceacae
                                                                     3360
cetetetece cageatggat ggecaeaget cageegeete etetgecaee agetgetege
                                                                     3420
ageceatgee tgggggtget gecatettet etceceacea ceettteaca catteetgae
                                                                     3480
cagagatece agecaggeee tggaggtetg acageceete ceteceagag etggtteete
                                                                     3540
cctgggaggg caacttcagg gctggccacc ccccgtgttc cccatcctca gttgaagttt
                                                                     36.00
gatgaattga agtegggeet etatgeeaac tggtteettt tgtteteaat aaatgttggg
                                                                     3660
                                                                     3679
tttggtaata aaaaaaaa
```

```
<210> 5792
<211> 4721
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4442)...(591)
<223> similar to gi5915904 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5792
aaatgcaggt agtttttccc ccttttcccc ttaaaaaattt tttttttccc taaaagcttt
                                                                      60
aaactttgga gggagggtgg gccaatttgt cccccccca aaaaaaaggt tcctttccaa
                                                                     120
aattcccaag taggttttta ataggccccc cataaagaaa aaaatttttc cttgccatcc
                                                                     180
ccggttaaaa ttgggcccc caagggttct tttaaaaggg ccccctttt tttttttt
                                                                      240
gcactgaagc agaagttgct ttaatcaagg ggtgaagtcc tcaatcaagg ggacctcact
                                                                     300
taacetttgg tggtggggte teageetace ceceacaage eetgaggeee etcaggaagg
                                                                     360
agggagcagt tgaacaacaa attatggcag aggccaggga atgggagtgg gggaacccgg
                                                                     420
gtcaaggtga aggggcagga cgctgaaagg gtgggagtga agctgaacgg ggcaggaaga
                                                                     480
gettaaceca egittetace tgggggetgg etgaggtgge tgtgcategg geagagegge
                                                                     540
accagagggc tgagggtcga aggggacagc aggggaaagg agtgcttagg agatgaggcg
                                                                     600
actgtgaagc tggtgcagct gctcctgggt cagcaccagc cggtgtcgct gtccaaaacc
                                                                     660
ageogeacat gagaaggtea etttgeeeat gtagaetgtg teateetget geteeteett
                                                                      720
```

```
ggccctgagg aaggctgatg aagggaaggt ggcaaagtca gtgggtactg tggctccagg
                                                                      780
gegetgagat aetgteteet tgaggadete ateettgage ttetegaegg tgteaeteag
                                                                      840
ggacttaaqc tqaqccactt gctccataag ttgggccgac gggctcttgg cagcagggct
                                                                      900
ggtgcgagtg atgtctacta cgtgcgtgtg tgtgctcaat tgattcaatg tctccagcag
                                                                      960
etggetggte ttacgataca gegetecage tggtaactca etgecaggge ceteatggga
                                                                     1020
                                                                     1080
tagetttgea acatgeagag ggggeaggga tgecaaggat geetteatet gggeteeett
                                                                     1140
gaggatgetg tteteatget ggagetggga gatgtgeage eteatggeag agatetgetg
                                                                     1200
aagcagcagt ggtgagteet teaccageee tgggeetgge acagaceetg gageetgeee
                                                                     1260
agggatggct cctcgctgct gttcttcacc agcaatgcca gagaccagag tagcaatgcc
tgaaggagga gggccccgga gtccctcaat cgtgcgtttg gactggctgt tcagacgctg
                                                                     1320
                                                                     1380
etttagttet geettetetg eetecagetg gtegatgtea geetggagtg catecattgt
ctcctcaaac tettteteet tetttegeag cagtgeetgg gteteeteea geegagtetg
                                                                     1440
gacttteteg atgegeteat etgeateett ggeageactg tecaacttet tetecaggag
                                                                     1500
ggtcagccgc acattggcct cacttagctc ctctccctta atcttgagtg acttcttcaa
                                                                     1560
                                                                     1620
ctccttaata actgtctctc gatcttcgag cttcaaaccc aggccttcag catctgtgat
ctctgcacga agggcagcag cccgcagttc aaccgggggg aggcttgctg gggggccgct
                                                                     1680
ctgcatcata ctccccctcc tgcatggctg tgaccaactt tgttcatggt actgatgagg
                                                                     1740
atgttgcatg actggcgcag acactcatag gggctgctgg agggggtccc atagatctgc
                                                                     1800
tegettgett tgaaagecag tteeteeaga geagecacaa gtageceete attetetgee
                                                                     1860
agtggggcaa tgagctgggc agcagcagct gccacctcct gcagcacagc cacgacccac
                                                                     1920
                                                                     1980
gtcaagtgtt tcctgcagtc taggagcgtg tcagatacct gtggtccaaa ggccagcgca
getgggatee eaggageate tgteeetgge attegeette ggatettett geagaactgg
                                                                     2040
cggatgtgca ctgcatgaag tttccagatc ccggagcagg agggcaatat ctgtagcctc
                                                                     2100
etgeccacce tgcaagaagg cacgcagecg tectacetee acactcatge agtecagage
                                                                     2160
actictgcgtg aacttaatgt ggtcagccag ctgcatagta cagtcctcag gctgttcggc
                                                                     2220
aaggtggatg ctgtacagat gctgatagta cttgatggcc ttggtgagag gctccacatt
                                                                     2280
                                                                     2340
gacagtetea tecagetgat cettgtgeag cagtteaatg aggaaateea aggagegete
atgggcactc atctcagggt acaggctgcc cactttctta tacacaatcc aacctgcact
                                                                     2400
gagagagggc atggcatcaa tagcggtggt agcggtggcc tgcagcaggc atcagcgagg
                                                                     2460
tacaccagte ctatggetge aaagetgagt tgeteeceag cageteeteg cageccagge
                                                                     2520
                                                                     2580
egetetgaac agtteteact tagtteaaac tteteetggg cetgetteeg gateagetet
gccttgcaaa tgagacgagg catgagcaac agcaccagaa cgcagtcatg gtccccacct
                                                                     2640
ggccgaagga agctgtcagg catgaaggct gtcagcaggg acatgtgtcg attggcctgg
                                                                     2700
gccacctcca totgcctcaa ttccatctca attgccttgg catgggcctt agtctcagca
                                                                     2760
aacttgattt tgaagtcaaa ggtctctgga ggtggctgct gttgcctctc cacagatgct
                                                                     2820
tectgetggt ttgteagtte eegatteaca teetgtagat gggeggteag etggeggtae
                                                                     2880
ttettgatgg tetgetggta gtetgeaace gteteetggg etgeeteeac acgettetgg
                                                                     2940
geeteacgaa eccgegegee tgecatgtee agetgeteec geageteeag ttetgtetea
                                                                     3000
egtgeattet cetgeagete ategtteate teatteateg ettecaagte teccaeagte
                                                                     3060
teceteaact egegeaettt etetteeaga tteaggitee gatetgteag cateteeace
                                                                     3120
atotecteag cacceagage ageategace tgeteettga geteateaat ggtgetetet
                                                                     3180
geotggetta getecteetg cagacgetee egetgttgee teacaactte cagetettgg
                                                                     3240
ttettetttt ceatgagett etggagettt aacatgetee tgettetetg aggaagaaag
                                                                     3300
atcocgcate ctcaccaggg catcettcag gegggcatte tgetectcaa getgettgag
                                                                     3360
ctgataactg gatgcagcgc catctgagcc cttctcttca atctcagcct tgaggatctc
                                                                     3420
taagtcagta gtgagctcgt ccaccegete ettcagtgce tecaceteet getgcaggga
                                                                     3480
ctcagccege tettcagcca teteettgte caaagtggee atetcaatgg catcagcagt -
                                                                     3540
atcagecate tectecatat agegtteett tgeeteeage geeteettgg etteettet
                                                                     3600
egecteettg aggegeeget geaggtegge etgetgetee tgeattttge tetteeatte
                                                                     3660
ctgcacctgc tccagctgga ttttgtgttt ctccagctct tttagctttg ctttgtcttc
                                                                     3720
tgcccgtttc agtctcaggg tctctagttt ctcctccagg tcccgcacct gagcccttag
                                                                     3780
tecetectee teettggatg gggaaggaag eggggggaet geteeaggag aggtgaggae
                                                                     3840
cggcgtgggg atgatgggtg ctgccagcgg agtctgagcc ggggtgctgg gctcactgct
                                                                     3900
gctcagctca cctgctgacg ctgagccaga ggggcccagg gagctactgg ccccagccac
                                                                     3960
cccagtactg gctgggcgcg tgggcttggg tcgccgagtt gtggtctttc gggctgtcgg
                                                                     4020
tgccttctta ggcttcagtc cccgcagttt gctagtcttt gcagttgtat cagttccctc
                                                                     4080
tettttgagg acttttgaag cagaagaate aggtgtetet ggggaagtag tatetgetee
                                                                     4140
```

```
atcttcaaat acctggatct gggactggcg cacaaagatg ccatgccctt catcacaagt
                                                                    4200
gaagtacttc ctgccttgaa cagttccatc atttttgccc tttgcttcat ccagaatcac
                                                                    4260
                                                                    4320
gectacecat ttgccagtgg caaacagtgt ggctccaaca taggccacag tgcctcggtg
geetttteea ateaceteta caegggagee caecegcaga ggeegggege ttgeeteege
                                                                    4380
actcatectg etgeogetgg gegteegget gtacaegtge etettgetet gtgecatgtt
                                                                     4440
getcaecegg cetetaecec etececeage tggccaaaga cagagagaaa aggtagaaae
                                                                     4500
ctaggcagga gggtcagggc gctgggccct catagaggga cacaggagtc gtcaggcaca
                                                                    4560
gccctcccca gtccatgggc ctcactcggt ggcctacacg ggtaggggtg ggggcagtga
                                                                    4620
tgggggctga ggagcaagtc ccctctgctg cctgaggatt cctgaaccca gagacacaga
                                                                    4680
atcctgcttg ccagctgatg agtctcactc tgcgctagtg c
                                                                    4721
```

```
<210> 5793
<211> 786
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(787)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (626)...(385)
<223> similar to gi687821 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5793
ttttttttt ttgactgaac gatttctaaa ctttatggaa aaagccaatg acaatcaatt
                                                                       60
agccaaaaac gagacgccaa atcccatctc actccagcgc catgccctct tctcaaacgc
                                                                      120
tegeoggete taggacetet ceaccageae agtteteagg agteetgetg gteteceagt
                                                                      180
getgttetäa gggtecacat gaaggeaggt caggegggae teecegggea ageaettetg
                                                                      240
tacgcggaaa gcacgaggcg caggagccat ggagagccgg tcctttggag acaggaatac
                                                                      300
ttaagaggat tggcaaaccg gagaaacgct gggagaggtg ccccgcactg cggtggtaag
                                                                      360
gcagagtete agtteteete gggettgteg getggeggte cacaaggetg aageatettt
                                                                      420
tocatcaagt tgaageggac tegegetitg eteteattet eegeaatgge gaagtagttg
                                                                      480
agaaggtcga agtggcccat gtaggagcag tacgagtcgc ggtgttggtt caccagccac
                                                                      540
teccaettgg tggtgtegge gtggeeegtg cegatgtaet tggaetgeag gtgeteeage
                                                                      600
tggctatgga tggtgtagcg gtcagtcatc tcgccgcttt ccccttcgct ctcaggtcag
                                                                      660
aggacgcagg taacaactcg ccgctctagc gttttacagg agagtgaagc caccgcgcgg
                                                                      720
aagctccagg tccgcgccgt cgcagaagaa tggcggaatt ccnccncatg gggtagcgaa
                                                                      780
                                                                      786
```

```
<210> 5794
<211> 1070
<212> DNA
```

<213> Homo sapiens

<220>

<221> misc feature

<222> (353)...(764)

<223> similar to gi4406556 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5794

```
tttegtetea etteageeag agageggggt tagggettea ttgeettgtg teetetgete
                                                                       60
egggagaett eggtgattet gecaeteeet eegtegetet gtgaeetget ggeattgaat
                                                                      120
gatttatago taagaotoca ggacaccoot gaagoogaga aatgaaatoo caagttgaco
                                                                      180
gtcaagtcca acgctcgctg cagacatcta gtggacccgg cgctcgcgga cggaagcgga
                                                                      240
cagacctagt tggatcetta teccaccaat etggeccace tttgetgeca tetaacaccg
                                                                      300
ctgaccggcc caccgttcct ccactgtccg ctggttgacc cgggcagcgg agagaggagg
                                                                      360
gtgttgtdaa tggaaatatg gattetteta cagcaaacat gtacatetat atcatqtqqa
                                                                      420
acaaggatag tgggaaaacc tetgattgtg aggacgtaga actgaqaaqa qcatatqaaa
                                                                      480
tgtcataaga aaaacactto tggagcatgt cgtcttcaag aaaatggtgc ccagacagtc
                                                                      540
aggattgtgt tacattttaa taggaatggg gatatttgtg atatactgac aaaccaagac
                                                                      600
aggtgactat aaaactgcaa tgtaaagtgt cagettette teacacettt atagtagaca
                                                                      660
tetgagaace teacteetgt cageatatte ttggggttga ateteaagtg atecatagaa
                                                                      720
tettagataa ageagatgaa aataggettt tetgtettee taagtaaaca geaatgaagt
                                                                      780
tgagagaaag aagatattgc tggaagtcat gataaagtct atcttctgtg accatatgtt
                                                                      840
teettagaga gttttagaca ttgaceetea tetaaaaaat tqtqaaaaaq qaeteteace
                                                                      90Ö
agtotgttaa tatgtatgta tatgaaagaa attactggta aacttotaag gcaggcattg
                                                                      960
gtgttacttt tttttatctt tattgtgtct gtaaaatgat tgtgtgtatt ttttctttga
                                                                     1020
ttagacaatg agattoccaa ataaatttta ttaaaqocaa aaaaccottt
```

<210> 5795

<211> 1502

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1330)...(1020)

<223> similar to gi4877643 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5795

```
ggctgtcaat gctgaactta cagtgttaaa gttcatttat ttttctctgt ttgctttttt 60 gttgaaaatg tagctgtct ggggtttggc ccgattttac aaggaaaatt attttcttc 120 ttccttttt attttaaatg agaaaaaata aaaaccctca caacgtgaga ttcctttact 180 tctgcagcat aaaagcaaat gaaggtaaga aaatctcctg gtacgaaaaa tttgagtaag 240 aattctctct agaataaaca aggtccccac agatagctga aggaaagagg aagcagttca 300 gtctggcacc cggtactctt tgggaaaaca aaaagggagg cagattgcat tactgctctc 360 ttctcataga aaacggtaag tttttgggc atggtccatt gtccaaqagt gtaaqaaaaq 420
```

```
aagtgagttg gccattcaga tagctaaaat gcagtttcat ctgaccaaaa acccaagatt
                                                                      480
atctgcacag tctctgcagt gccaggacaa tgcaggtgag agaccaggag agcagggagt
                                                                      540
ggccacgctg ggctgcagaa gagtccacct ctctccggtc gggatccact gcgggggcct
                                                                      600
ctgtggtgac aaactcaaac tccgtgggac acacgtcatc catgcaccca ctgccactcc
                                                                      660
ctgagccact ggattcatca cttgtgtcct ggaaattgac atcattgcca ttgtaggcgt
                                                                      720
tttttagttt gttggtcatc acacggagag ccataatctg ctgtctgatg aaagtgtcag
                                                                      780
geogagtgat gtocacatec caceteggga ttgttgatet ggttggtgag cecateatte
                                                                      840
atgateteag geaagtatet ggetttgetg tgeeegttee ageatteete etegttggae
                                                                      900
gtgcccgctg tctagctctc gtccttgcag atagtgtagg gtaatgctga ccagaccttt
                                                                      960
ttagagaget teaatttete ttttatgtet gtgaceagee ggteeaaget tgtgeetgea
                                                                     1020
gcagttgttg gtctttcctc aggattgtag ggcctgaaac gtgtattaaa attttcagga
                                                                     1080
gctgagcggg cagatctgag ggctggagca ggtttgggct gaccacatcc ctgaaagacc
                                                                     1140
tttgcagaca cctgcatgct gttttcttgc atgttcataa tggcttcaga aatcttgaca
                                                                     1200
tctatcgggt ccatgaccga ctcaatgttg aatggccct ccagtcgctc tgccaccaag
                                                                     1260
agcattgcat ctgttaaaat acaggaacat gatttatttg caaactggga gctccaggtt
                                                                     1320
cccaacctgt gtttaaacat tgttaaaaca actggatgaa aaataatggt gcattcacgt
                                                                     1380
ttttaaattt gctttcatat agtccaaaat gaaatagatg actgaatctt aggacgactg
                                                                     1440
tattttgttt gaagattcaa aattatttta tatgtctaga accagggctg aaaataagaa
                                                                     1500
                                                                     1502
```

```
<210> 5796
<211> 1143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (502)...(822)
<223> similar to gi2318003 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5796
acgtcatatg catcagaata agctgtttta tttttgtatt agtagcgggc taagttatta
                                                                       60
acaatcatac tttcttggat aagaacattt ttaacaagga tatcttctaa agaatgtgta
                                                                      120
ttcgtatagc ataccaatac cttttcacaa ctgtggaatc agaataattt atggcattcc
                                                                      180
cgatagagga ggcagcattg tttttattga ttggaataag gaaaattttg aaggatgtat
                                                                      240
atatagettt tagtteeate teegettget ttatgatteg attatttgtt tacttaettt
                                                                      300
catatgggca taacatgaat ttaaatcaag cagatttaaa atttttcaac agttggaacc
                                                                      360
taagetttet gaggtgaaaa atgtttetta aaaggtttgt aggaaagaga tttaaegagt
                                                                      420
cttttcaatc gtttaataaa agtatacact gagcgccttc tacagagttg ggcaggtgct
                                                                      480
gccgagaagc ttagcgctac gccggcctcc aagaccgcac atccgggaca ttcgagagtc
                                                                      540
agteegagge eeegeeetee taagggeggg geeaetggge aateggegea ggeeettegt
                                                                      600
cgtgccccgc ctcgtctgcc ccgccagcgc gtcgagggag gggccagcga cacatggcct
                                                                      660
agtaactgte eggeegege getggettaa gecatggetg agggtageeg gatteeteag
                                                                      720
gcccgggcgc tectacagca gtgcctgcac gcccggctgc aaattcgccc agccgatggg
                                                                      780
gacgtcgcgg cccagtgggt ggaggtaacg tcagcccggc agctctcgtt atcctccggc
                                                                      840
gtgcggggcg gttttttccg cgttgtctcg gtgactcgtc cgctctgtgt ctccctctga
                                                                      900
gaccggcggt ccggccgcgg ggataccggg tcagcttgaa gctggccgcg gtggcctgcc
                                                                      960
tggctgcgct tgtcttttcg gtccagcatc accgttcccc agcgccagtt gtagcacccg
                                                                     1020
agaggaagag cgtgtctccc ttcttggggg gaccacaggt ccaaagagga ctggtgatct
                                                                     1080
```

<210> 5797
<211> 1929
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1364)...(1460)
<223> similar to gi1510153 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5797 cagacagega ttaggtetat tteaaggeat tetgecagga geacagegae tgggggeeca 60 egtaatgage ecacatetga geceaeggaa eccagecagg etggegagga eetggaaaag 120 gagaccetge geaageageg getgeageag etatgaggag gaettetaeg agetggtgga 180 gccggctgag gtggctgagc ggctggacct ggctgaggca ctggtcgact tcatctacca 240 gtactggaag ctgaagagga aagccaatgc caaccagccg ctgctgaccc ccaagaccga 300 egaggtggac aacetggeec ageaggagea ggaegteete tacegeegee tgaagetett 360 cacccatctg cggcaggacc tagagagggt tagaaatctg tgctacatgg tgacaaggcg 420 cgagagaacg aaacacgcca tctgcaaact ccaggagcag atattccacc tgcagatgaa 480 acttattgaa caggatctgt gtcgagagcg gtctgggagg agagcaaagg gcaagaagag 540 tgactcgaag aggaagggct gcgagggctc caagggcagc actgagaaga aagagaaagt 600 gaaggegggg cetgacteag teetggggea getggeagge etgtecacet cattececat 660 cgatggcacc ttcttcaaca gctggctggc acagtcggtg cagatcacag cagagaacat 720 ggccatgagc gagtggccac tgaacaatgg gcaccgcgag gaccctgctc cagggctgct 780 gtcagaggaa ctgctgcagg acgaggagac actgctcagc ttcatgcggg acccctcgct 840 gegacetggt gaccetgeta ggaaggeegg aggeegeace egeetgeetg ceaagaagaa 900 accaccacca ccaccacege aggacgggee tggttcacgg acgactccag acaaagcccc 960 caagaagacc tggggccagg atgcaggcag tggcaagggg ggtcaagggc cacctaccag 1020 gaagccacca cgtcggacat cttctcactt gccgtccagc cctgcagccg gggactgtcc 1080 catectagee acceetgaaa geeeeegee actggeeeet gagaeeeegg acgaggeage ctcagtaget getgactcag atgtccaagt geetggeeet geageaagee ctaageettt 1200 gggccggctc cggccacccc gcgagagcaa ggtaacccgg agattgccgg gtgccaggcc 1260 tgatgctggg atgggaccac cttcagctgt ggctgagagg cccaaggtca gcctgcattt 1320 tgacactgag actgatggct acttctctga tggggagatg agcgactcag atgtagaggc 1380 cgaggacggt ggggtgcagc ggggtccccg ggaggcaggg gcagaggagg tggtccgcat 1440 gggcgtactg gcctcctaac tcacccctt ccctgtccca ggccctgccc tggtccccc 1500 acaaggeete ageecagtea caactgeeat ttecagtete tgetgagtgt cecagaceet 1560 cgaggctgcc actccgtcgt ggttttattt ttaatataga gagagttttg aattctacac 1620 tgttgtettt cetetgtget ggeetaggae attaggatte ettecaegge teeggeeget 1680 aggaccetge caggteeege geaceateee tgeeetgeee aegtggtatt getgggetee 1740 tggctagatg caagcaaggt ggacaagagc tcaggactcc agcccactgc cactgggtga 1800 cacagactgt cgtttgggca ttatttcatg gcagatgggc cagtccaggg cctacccqc 1860 ettgececca gateceactg gggtecattt gaggggteat getacaetee acegateece 1920 aagtgtatt 1929

```
<210> 5798
<211> 2711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (956)...(1760)
<223> similar to gi193527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5798
tttcgtgcgg aggtcgcggc gagccgggcc gagcagtgag ggccctagcg gggcccgagc
                                                                     60
ggggcccggg gcccctaagc cattectgaa gtcatgggct ggccaggaca tcggtgaccc
                                                                    120
gccaatcegg tatggacgac tggaagccca gcccctcat caagcccttt ggggctegga
                                                                    180
agaageggag etggtaeett acetggaagt ataaactgae aaaccagegg geeetgegga
                                                                    240
gattetgtca gacaggggcc gtgcttttcc tgctggtgac tgtcattgtc aatatcaagt
                                                                    300
tgatcctgga cactcggcga gccatcagtg aagccaatga agacccagag ccagagcaag
                                                                    360
actatgatga ggccctaggc cgcctggagc ccccacggcg cagaggcagt ggtccccggc
                                                                    420
gggtcctgga cgtagaggtg tattcaagtc gcagcaaagt atatgtggca gtggatggca
                                                                    480
ceacggtgct ggaggatgag gcccgggagc agggccgggg catccatgtc attgtcctca
                                                                    540
accaggecae gggccaegtg atggcaaaae gtgtgtttga caegtaetea eeteatgagg
                                                                    600
atgaggeeat ggtgetatte etcaacatgg tagegeegg eegagtgete atetgeactg
                                                                    660
tcaaggatga gggctccttc cacctcaagg acacagccaa ggctctgctg aggagcctgg
                                                                    720
gcagccaggc tggccctgcc ctgggctgga gggacacatg ggccttcgtg ggacgaaaag
                                                                    780
gaggteetgt etteggggag aaacatteta aateaeetge eetetettee tggggggaee
                                                                    840
cagteetget gaagacagat gtgecattga geteageaga agaggeagag tgecaetggg
                                                                    900
cagacacaga getgaacegt egeegeegge gettetgeag caaagttgag ggetatggaa
                                                                    960
gtgtatgcag ctgcaaggac cccacaccca tcgagttcag ccctgaccca ctcccagaca
                                                                   1020
acaaggteet caatgtgeet gtggetgtea ttgeagggaa cegacecaat tacetgtaca
                                                                   1080
ggatgetgeg etetetgett teageceagg gggtgtetee teagatgata acagttttea
                                                                   1140
ttgacggcta ctatgaggaa cccatggatg tggtggcact gtttggtctg aggggcatcc
                                                                   1200
agcatacted catcagoate aagaatgeee gegtgtetea geactacaag gecageetea
                                                                   1260
ctgccacttt caacctgttt ccggaggcca agtttgctgt ggttctggaa gaggacctgg
                                                                   1320'
acattgctgt ggattttttc agtttcctga gccaatccat ccacctactg gaggaggatg
                                                                   1380
acageetgta etgeatetet geetggaatg accaggggta tgaacacaeg getgaggaee
                                                                   1440
1500
tgtacaagga ggagcttgag cccaagtggc ctacaccgga aaagctctgg gattgggaca
                                                                   1560
tgtggatgcg gatgcctgaa caacgccggg gccgagagtg catcatccct gacgtttccc
                                                                   1620
gatectacea ettiggeate gieggeetea acatgaatgg etaetticae gaggeetaet
                                                                   1680
tcaagaagca caagttcaac acggttccag gtgtccagct caggaatgtg gacagtctga
                                                                   1740
agaaagaagc ttatgaagtg gaagttcaca ggctgctcag tgaggctgag gttctggacc
                                                                   1800
acagcaagaa cccttgtgaa gactctttcc tgccagacac agagggccac acctacgtgg
                                                                   1860
cetttatteg aatggagaaa gatgatgact teaceacetg gacceagett gecaagtgee
                                                                   1920
tccatatctg ggacctggat gtgcgtggca accatcgggg cctgtggaga ttgtttcgga
                                                                   1980
agaagaacca cttcctggtg gtgggggtcc cggcttcccc ctactcagtg aagaagccac
                                                                   2040
ceteagteae eccaatttte etggageeae ecceaaagga ggagggagee ecaggageee
                                                                   2100
cagaacagac atgagacctc ctccaggacc ctgcggggct gggtactgtg tacccccagg
                                                                   2160
ctggctagcc cttccctcca tcctgtagga ttttgtagat gctggtaggg gctggggcta
                                                                   2220
cettgttttt aacatgagae ttaattacta actecaaggg gagggtteee etgeteeaae
                                                                   2280
acccegttee tgagttaaaa gtetatttat ttaetteett gttggagaag ggeaggagag
                                                                   2340
```

```
tacctgggaa tcattacgat ccctagcagc tcatcctgcc ctttgaatac cctcactttc 2400 caggcctggc tcagaatcta acctatttat tgactgtcct gagggccttg aaaacaggcc 2460 gaacctggag ggcctggatt tctttttggg ctggaatgct gcctgaggg tggggctggc 2520 tcttactcag gaaactgctg tgcccaaccc atggacaggc ccagctgggg cccacatgct gacacagact cactcagaga cccttagaca ctggaccagg cctcctctca gccttctctt tgtccagatt tccaaagctg gataagttgg tcattgatta aaaaaggaga agccctctgg 2700 gaaaaaaaaaa a
```

```
<210> 5799
<211> 1760
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1672)...(144)
<223> similar to gi5777952 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5799 ttttttttt ttgageggtt ttettaagtg tetttaatae tecaeteagg geagteeeet 60 ccctctactg agaggetett ggetetggee ecaagageag etggaaggee etggeetgaa 120 ettcaaccaa ettgaatgte caaggetgtg tgtgecaege teeetggete tggtaegtgg 180 tatgcaagca ceteteggge ettgggggag tttgateece tecagecaet eetgggtaca 240 geteetgeae gtgtgeaeet ggaeteegga egeegeaeag ggatgteage gtaaatgeet 300 tecattetge egeageaggg geettateeg catgteegte ttgaatettg ggetttggee 360 tettgecatt ttaageatee teeageaeag gegaggaeet ceacaaagtg gaattgggaa 420 attigecett ettaagetit aggateatgi tetggatgit tegaaageea taggetgeag 480 caaagcgtaa caccacctct ccgttcttct caagggtgac ctcttggaag tctttgtttc 540 tragggeteg gtaagtgace tectreacat controgttg aaragetest tggcogratg 600 totgaagatg tgtgccaggt gcccgtctga gctggctcca tcatgacgcg tcactttgtc 660 ctccttcaag tctccaaaca gagtgtcgac ggcagcatct ctcactgaga ggtcaccctt 720 gctcccatta atttgaagca aatttcaacc ttgatgttaa acaacgcaag tcaagcgccc 780 ccgggaagcc atgcaaagcc agggggaagg gctttccctg aagagcctcc cagcttcttg 840 tcattaacca aggggccacc aatgaccgtg gaaaaatctt ctctggagac aaggttctgc 900 tgtctggcgg aaataatcct tcaccaaaga gcccatgacc tgctgggggg actttggcgg 960 tgccaagaag gtgggccagt gatggggcga ccccagcaac ccgctccggc gtatcggacc 1020 ccagcccagg acaggcagag gtcagcatgg ggcagggtgc gttccctccc tcactgtgct 1080 ggcgaataac gacgcacgaa ttctttttg actctcccag gatactaaaa tccgcagcta 1140 tegtegtate aaatacatag tgeaceccaa gaettttgag gaaaceacag agtettetgg 1200 atgcatcagt tacactgagg ttgaatttag cagcaaaata aggcaaagat tgaggacaca 1260 cagacactaa cccagctttg tgctttgagg tatcacattt cttgttaagg ttcagaacgc 1320 ggaagaagtc cttggcattt tgctgggaaa gttggactcc ttcctctgca gtcatacagc 1380 tgtcacatgc caggcagtcg ctcaaaaata tcttggcatc agccaacttg tggaattctc 1440 cettetgtag teccagetae tagggagget gaggeaggag aateaettga geeteagagg 1500 teaaggetge ggtgageeat acagtgagee actgeactee ageetgggtg acagtgagae 1560 ectetecatt tteetggget ggacteggtg categgetga cacattetet tggteateag 1620 tttttgtttt cttactacat tccttgcgcg tgcagtgctc acacttcatc tggagcgcgg 1680 cgggcgggag gccgggcgcc tcagcctcag ggaagcaccg ggagactggg acaccactgc 1740 ccgccgcccg cggccctttg 1760

```
<210> 5800
<211> 2194
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (75)...(1280)
<223> similar to gi5442036 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5800
tttcgtctcc cctcccttcc ccggccccgg ctctggcccc ggcccattcg ctgttgggtc
                                                                       60
ttetgetagg gaggatgteg ggttegtege tgeceagege cetggeeete tegetgttge
                                                                      120
tggtctctgg ctccctcctc ccagggccag gcgccgctca gaacgctggg tttgtcaagt
                                                                      180
cgcccatgtc agaaactaag ctcacggggg acgcctttga gctgtactgt gacgtgqtcq
                                                                      240
ggagececae gecagagate cagtggtggt acgeagaagt caacegggea gagtetttea
                                                                      300
gacagetgtg ggacggtget eggaagegee gtgtcaeegt aaacacegee taegggtcaa
                                                                      360
acggcgtgag tgtgctgaga ataacccggc tcaccttgga ggactctggg acttacgagt
                                                                      420
gcagggccag caacgacccc aagaggaatg acttgaggca aaacccctcc ataacatgga
                                                                      480
ttcgagccca ggccaccata agcgtccttc agaagccaag gattgtcacc agtgaagagg
                                                                      540
teattatteg agacageest gtteteestg teaccetgea gtgtaacete aceteeagge
                                                                      600
teteacacee ttacatacag etactggaca aaagaatggg ggtggaactg aagtgcaact
                                                                      660 ·
cgtaagaatg ccagcaacat ggaagtacag gatcaaataa gccgagagct gaggattcag
                                                                      720
gcgaatacca ctgcgtatta ttcactttgt taagcggctc ctaaagcaaa cgccaccatt
                                                                      780
gaagtgaaag ccgctcctga catcactggc cataaacgga gtgagaacaa gaatgaaggg
                                                                      840
caggatgcca ctatgtattg caagtcagtt ggctaccccc acccagactg gatatggcgc
                                                                      900
aagaaggaga acgggatgcc catggacatt gtcaatacct ttggccgctt cttcatcatc
                                                                      960
aacaaggaaa attacactga gttgaacatt gtgaacctgc agatcacgga agaccctggc
                                                                     1020
gagtatgaat gtaatgccac caacgccatt ggctccgcct ctgttgtcac tgtcctcagg
                                                                     1080
gtgcggagcc acctggccc actctggcct ttcttgggaa ttctggctga aattatcatc
                                                                     1140
cttgtggtga tcattgttgt gtatgagaag aggaagaggc cagatgaggt tcctgacgat
                                                                     1200
gatgaaccag ctggaccaat gaaaaccaac tctaccaaca atcacaaaga taaaaacttg
                                                                     1260
cgccagagaa acacaaatta agtactgctt acaatatctt taggttcctg aaactggtgg
                                                                     1320
caacatgacc tgctaaaatt ttctgcttgg acctctttgg ttctctcccc tttcaagtga
                                                                     1380
gcaacaccac aatgactgtc taaagcatgc cttatttagc ctctcctgta agggtgatct
                                                                     1440
agccaggtac attttaaaca atgcttcagt gtagaaggtg taaactattt tgggcttgat
                                                                     1500
gtgctgtgaa tgttgctttt ttttttcctt tgttaaaata tttaaataaa agtgaaaagg
                                                                     1560
tectetgagg ateaaateat geatgegeea ttttttaett aatgeagetg ttaaattgge
                                                                     1620
aaagetetaa aatgeaetge tgeeatetag ggataeaett ttgtaaagta eageaaaaee
                                                                     1680
tacagatata tacagtatat aaatatatat atatatat ttatattttt gggggtggga
                                                                     1740
gaaatccaaa ataaagtaaa tgcttgtttc atttttaagc tgctgatatt cattccttat
                                                                     1800
tgtatgttgt cagatgagga aattgtgcag ttctggtaca taaagatgag taatataaac
                                                                     1860
tgaaatctat aattttaagg gottaacctg tgactttaat aagctggaac agtccactga
                                                                     1920
atgggtataa tgaattgcag .tatatacgta tgattgcttt ttaagtgatt atctttctt
                                                                     1980
ctgttaagtc atgtaaattc ataaatcctt ttgcactgat gtgttgaacc ttattcttgt
                                                                     2040
acattcattc aatcaaggca aacttttata atttttcttt tgtttccaat gaccttgaaa
                                                                     2100
tgttatagca tggtaatatt ctatgcaact atagttatac tttttggttt gacactgtat
                                                                     2160
tttttcacat tgatttactg gttgatgata gatt
                                                                     2194
```

```
<210> 5801
<211> 694
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (60)...(6)
<223> similar to gill74092 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5801 cattaatttc tgtctttatg ccaatgtcac actgtcttga gtacttcctt tgtaataggt 60 tttgaaacca ggaattgtgt gacttctaca atttcattct tctttatcaa gcatgttttg 120 getgttttgg, gteetttgaa attacatatg aattteatea gettgteage ttgteagett 180 gateagettg teagettetg caaagaagee agettggagt ttggtagggg ttgcattgca 240 totocagatg aatttgggga atgtotocat attaacaata tttagtotto ctatoottga 300 acatgggata tattttcatt tatctggctt cagttctttc aacaacattt tgtagttttc 360 actgtacaat gatctggtet tttgetttee aaaaccagaa actettttaa gttgaaggtt 420 tcttaagact tttggggagg cagttctgct aaacaaacag aaaagagaac atttggttag 480 aaaaaaacag agataacagg aagattaatt attttaataa taaagcaagg aaccaattta 540 ttaaaatttt ttagaatatg ctttgtaacc ataatgettg aatetgttat acatttgtet 600 cagactggaa gttccccttt gtgacttcaa gatacttgag aaacaatcag taatcaagta 660 atgggttgct gggtatagac aaacaacaca gagg 694

```
<210> 5802
<211> 1372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (896)...(1280)
<223> similar to gi2992628 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5802 gggccgcctg gacacacagg tcccctggca caggtaacaa cagaggaccc tcagggagag aaggctccca gcttcctcta caccctgaga accgctgccg agagacccaa aagacacctg ggcatcagtg ctgcagccct accttggcct ccaggtagat gctagtggag ggcgccgcc tggcgacaaa ggaagaggca ggcagcaaga gacagcgcg agatgacgaa cagggagtcg ctcaccagga cgcggacaag cagcagggcc cagggctgtg ccgccgccc gcatgggaga 300

```
gcacagcaca cagcacgttc accagcagaa agagcagcga ggcccccaca aaggcccctc
                                                                      360
ggacagegag caageetegg eteatetteg ggeeegaege tteaetttgg cettgaacae
                                                                      420
cacctggggc aaagtagagg ttcataaggc gtcaaggtga agaactgcag gcagacgggg
                                                                      480
cagcagtaga gaagccagaa gggcaaaggg ccccagggtt gtttggcgcg gggagtatct
                                                                      540
tcggaaatta gaaggagaaa aaggttgtta cgcaaggggg ccccagaagc agacagaggg
                                                                      600
ccaggaacac ccgtctgata agctgagacg cttgtgcccc atacagaagc accagccaga
                                                                      660
gctgggcata gacggagaag aagagcaggg catacagggt ggtgtaggca gctgtcagcc
                                                                      720
ccagggtcac agcaggtggc agcgcaggca ccaagcccgg caagcaggca accaggccca
                                                                      780
gacaggttac tetecatgte aagggaggga ggeetgaate eeggagacag acaaggaggg
                                                                      840
actgtcggcg ggaccaggga aataaatacg gaggggtggg aattgcaggg tgcagagag
                                                                      900
gagatggggc gctcaggagg aaagaagttg tggctgacag gccccctcc tcaacagaga
                                                                      960
gaccettgce ettggggaac acaggcagee tgggeeccag geceeteact caggggeatg
                                                                     1020
gaagggcagt ctcttttctc caggacagac cggatagggg ttgggggtgt ctcctccctg
                                                                     1080
ggcctacccc agagccaagg atggggggat gcagaggccc aaggagagga ctccctggcc
                                                                     1140
teggtegtte atgtegteet gggtggaggg ggaggetete teteeteeaa taatgeggat
                                                                     1200
ggggagggcc tetgeeteet gteetegtaa ttetegaaag etgeeeeege eccaeeetee
                                                                     1260
cccaccgcgt ccacgctcca gcctcaaggg gagggaggag gcggacgcca ggtcctcagg
                                                                     1320
ccgctgatgg gagagccggc tcaggtcgtg gggacccggg gctccgacga aa
                                                                     1372
```

```
<210> 5803
<211> 1345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1322)...(238)
<223> similar to gi184848 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5803
tttttttttt ttcacaggig caaagattca ctttttattt attcattctc ctccaacatt
                                                                       60
tagcataatt aaagccaagg gactaggagg ggggtgaggt gaaagatgag ctggaggacc
                                                                      120. . .
cgcaataggg gtaggtcccc ctgtggaaaa aggttcaaaa ggcccaaagg atgggaaggg
                                                                      180
ggtcagcgct ggaactagag gagcaggtgg gggcaacttc ctccccctcc taaaaactct
                                                                      240
ecceetytty aaacetettt gtgaaeggge cgaaeeteag geeeetgaat gggtgaaett
                                                                      300
cegcaggeeg taagagtttg tgttteetee gtaggtetge tttgeteage gteaggggtg
                                                                     360
ctgcttgagg gctggtaggg tgctgttcct tgtctagtcc tgctctgttg acactctttc
                                                                      420
ctgggggagt ttacccccat ttggaagggc gttaatccac ccttccactg gtactttttg
                                                                      480
gestetttt ggggatagag gttattsags agggsasaca asagaggsag ttssagattt
                                                                      540
caactgetca teagatggeg ggaagatgaa gacagatggt geageeacag ttegtttgat
                                                                      600
etecacettg gteceetgge caaaagtgta caggtgaate ageatactge tgacagtaat
                                                                      660
aaactgcaaa atcttcaggc tccagtctgc tgatggtgag agtgaagtct gtcccagacc
                                                                      720
cactgccact gaacctgtct gggatgccag tggccctgct ggatgcatca tagatgagga
                                                                      780
gcctgggagc ctggccaggt ttctgttggt accaggctaa gtacttccta ctaatagtct
                                                                      840
gactggccct gcaggagagg gtggctcttt cccctggaga caaagacagg gtggctggag
                                                                      900
actgagteaa cacaatttet eeggtggtat gtttgatete eagettggte eeteegeeaa
                                                                      960
aagtgtacgg gggaggccag ttggtacgct gctgacagta ataaactgca aaatcttcag
                                                                     1020
getetagget getgatggtg agagtgaagt etgteecaga eccaetgeea etgaacetgt
                                                                     1080
ctgggatgcc agtggccctg ttggatgcat catagatgag gagcctggga gcctggccag
                                                                     1140
```

```
gtttctgctg gtaccaggct aagtagctgc tgctaacact ctgactggcc ctgcaggaga 1200 gggtggctct ttccctgga gacaaagaca gggtggctgg agactgtgtc aacacaattt 1260 ctccgggggt atctgggagc cagagtagca ggaggaagag aagctgagct ggggcttcca 1320 tggttccctc tgggtcctaa ctgag 1345
```

```
<210> 5804
<211> 1233
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (795)...(1062)
<223> similar to gi529138 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5804 aggggttttt ttccaaggca attaatttgg gtaaccccag ggtttttcca ttcccgcggt 60 tttaaaacgc gggcccggga atttaattta ggggccccat taaaaaaatt tttcctttgc 120 aacccggggg agttaaattt ggttctttta aaagggcgcc cctttttttt tttttttt 180 tgatggttaa aaaaatttgg gttttattgt ttttgctaaa taatactaaa aaaaaaattt 240 cattttgaag gcagggcttg aattatttaa tttgatccat ttatttaatt aaaaaaaaa 300 ggaaggggaa agagatcatg gccaaaaaaa tagtagttaa cccccacccc accccaaag 360 ctctagccag tcatgtgagc atcacccaca tcccactcag tgcctgatat tcggatggtg 420 gcatactetg ceccaggaga etgeetgaag gcaeggggca atgggtgeca attttagete 480 tcagcaggtt agtcaaccag acaaactggt gggctaaagt ccagaaattc tttccaggtt 540 ttctgctcat tggctgagca catacaaact gtcataagcc tgtaaaattt aaggggagtt 600 ggggtggggc gtaagagcaa aaggacagca ggagaagaga aattacgggt cacccaagtt 660 tttcctgggc tagtggctct ggatatagat ttaaagagag gtcagagtaa atggactcca 720 ggtttcttat caaagaaaac tatccctcaa tgaggagctg agatgtgcca tgcaagagag 780 ttetteetge agaggeaeag gagaaaggge agetgaetet eteatgtgga gagagtggeg 840 aggaaggtet tetagtacea tgaagtaaga caggeagagg gagaateetg aggtttggge 900 caaatgtgag actggtacac acacagttaa agactaaaaa gccatcagga accctcaaag 960 ccaaattcta tctgcacact ggctctacaa agttcgcagc aagaatctct tgcaccaagt 1020 caagttagtg geetggetat gatggatggt ggggagggea átácattttt atttteagag 1080 ggatgaggtg ggaagaacag ccatgatcta gtaaaaagag acctgcaaga agcagaaaat 1140 atttagagaa cattttaata tatattttca tatatatatt taaagttaag aaaaataaaa 1200 ctaattcaag ccatgccctg tgcaaaaaaa aaa 1233

```
<210> 5805
<211> 2173
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1848)...(676) <223> similar to gi3907579 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5805
gctgttgcat cggctgtcat gaattcggca cgagctcatg ctgccagatt atctgggtgt
                                                                       60
ggtggcacta gaatggagat acttcatggg aataatactc attgttcttg accccactgg
                                                                      120
gtcagtgctg accetaceae cacceaetet geageageae ceagatgeta geettgtaca
                                                                      180
gaaagcccca gcatctcttt acagtcaatg agctctctct ttattgaggt atttcaaata
                                                                      240
tacaaacact tcagagettt ttagatatgt gaaggtecaa tttagtgaag eggattaaca
                                                                      300
aaacatgatt ctaaaagcct gcctcctcta gaccaaggcc atgtaaaaga tttatgtacc
                                                                      360
aatcagcatc ttttcctttt aataatcttc aggatgttgt gttgggtccc cagattccca
                                                                      420
tttgattttc ttgcatcatt ttctcagact gtttgcttcc ttgcttcctc cccagtgagt
                                                                      480
gccttgggca ttttgtgtgt gcagatagag aagtacagag ttactgcagg agccctcagg
                                                                      .540
agtgagacaa caggaaatga caaagtaata cagagctgca gtagctggga tgggtgagga
                                                                      600
ccccacttgg gatgccccat ggtagagtac tggtgccttg ggagggtaga actgctcagg
                                                                      660
tetageaege eteaetgaag attggattea eetgetgggt gaeteggatg aaggtagtte
                                                                      720
tectgeteaa etetttgage ttagetgete ceacataggt acaegtagag eggateeete
                                                                      780
ctaggatgte teggatggta tgttecaeat eteetttaaa aggaaettee aetgtettte
                                                                      840
cctctgaggc tctgtactca gccacgccc cagcatactt cttacatggc caatttaaga
                                                                      900
actcattcca tagaagaget tgtacttett gecatecete tegatgaget caccacetga
                                                                      960
ctcactgtgc ccagccagca tgccacccag catcacgaag tcagctcctg ccccaaaagc
                                                                     1020
cttggccaca tccccaggac agctgcaacc tccatctgaa atgatgtggc ctttgaggcc
                                                                     1080
atgagcagca tetgcacaet ceateactge getgagetgt ggataceeca etecagittt
                                                                     1140
cttccgagta gtacacacag agcctggccc aattcccact ttgatgatgt cagccccaga
                                                                     1200
aaggatgage tettetacea teteteetgt taccacatte cetgecatga tggtgtgetg
                                                                     1260
ggggaagege tteegtacat ettttacaaa tteaacaaag tgtteagagt agecatttge
                                                                     1320
cacatccagg catatatact tcacctgggg aatagcttcc aggatctgtt ccaqctgctc
                                                                     1380
aaagtcagaa gagcctgtgc ctgagctggc agccagatgc tcaagacagt caggattctg
                                                                     1440
gccagcaaac tettgccaet gaacgagget ataqtqetta tqqacaqcaq tqaaqaqaqa
                                                                     1500
gaacttetea geaacaagta tagaggeagg taatagtaet gacaggagea geatetteea
                                                                     1560
tttcaaagtg aacaacttgt atataagaaa aacacatccc atttggggca catcccagaa
                                                                     1620
actoccagga acctaggact tacagagaac cttggccatc tcaaaggtgc ccacagtatc
                                                                     1680
catattggca gcaatgatgg gaaccccaga gtatgtctgc tttgagttcc gaaatgaaaa
                                                                     1740
ggatettgtg agatecaeet caettegaga ettaagggta etgegtttgg geetcaaaag
                                                                     1800
gacateettg aagteeagtt teacategtt gteaatatga ggeatggege ttageetegg
                                                                     1860
ggtagcgatg aatctgaggg ctggaaggca ggaagtcata aggaccaatc ttcccctggg
                                                                     1920
etttaaegee etgttaegge tggtggeete tettegetta agttgtggaa ggtegggeaa
                                                                     1980
aggeogaagt gtggtoootg aagootgtoa ootogacoca tooogtggot gogattacoo
                                                                     2040
tagggeteca teccaggtae tgtttgttgg ggaggagage tgggaaaggg ttgtgagaga
                                                                     2100
ccctgacggt gcattcctta ccccgctaca cttccttctt ctacccctgc aaagagcaat
                                                                     2160
ggggcaagag gct
                                                                     2173
```

```
<210> 5806
<211> 1849
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1462)...(349) <223> similar to gi3387962 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5806
ttttttttt taaagataaa attaatttat ttgacttcac aacttcattg ggccacacag
                                                                       60
gggcccacaa gtcctagaag cacaaccttg tggaagtggg ctggggaggc cagttctctg
                                                                      120
gactgcctgc tcccttgtcc agagetgcct tgagccaggt ccctcctgac cccatcatcc
                                                                      180
tgttcccata tgcaagggct gctcaggtcc acctgcaata aacccaggcc tgcctctggc
                                                                      240
agcagaggac agggcetegt gggtggcage agcactggte etegtggetg tgggtgtggg
                                                                      300
tgggtgggta ggtaggtggg aaggagggca ggcaggaggg tgtggttcag tgcagagagc
                                                                      360
tgctgttctg ctcttcaaag gccatcttgc ccagaagctg gctgtccaac tccacccac
                                                                      420
ttacaggcag ctggaagaag ttcatttcag ctgctaaggc tgccatggca gaagggtcct
                                                                      480
ggccaaactg agctcgcaac atcatgtcca ttttctccag cctcctcttg agccgcttgg
                                                                      540
cetetegete teggatgage egggeetgee getttteegg ggttteaatg geeegettea
                                                                      600
geeteatgge etecegatee egetgeagee ggegtgeeeg etgetegtet gteteetgea
                                                                      660
tgegetgeaa gegettgget teaeggteee teatgegeet caceteeege teëteggggg
                                                                      720
teteattite eegeeggete ttettggeeg tgegeteteg tteeageege tgeageegta
                                                                      780
cttccaaagg ctcattctgt cgacgtagag cccacttgcg tacactggga gtctgggctt
                                                                      840
ccagcagttt acggtaggca gcacagttgt tgcacacaag cagaattcca gcagggtaca
                                                                      900
ctggaggact aaaggcaata tccttcccct cagcactgga gggaccctca ttgtggactg
                                                                      960
tgggtaggga ttccatattt agtacttcag gaagtttctc actgttaaaa gtggcatggc
                                                                     1020
tggtgaaccg ggctccacac acagcacagt tagatcgctg gtcctccgag tggattaaga
                                                                     1080
ggtggcgacc caatgacccc ggggagctaa gggcccggcc acagacagga acacatgtag
                                                                     1140
ctcttggcgc tcaccactgc tgcagtgtgc tggtacacgt gagcaatcaa ctgctcccgg
                                                                     1200
ctcccgcagt ctagctggca gaggggacac tggcagagtt caagcaaggg gtcagaattc
                                                                     1260
aaatteeetg tgaeetegtg etettaeeet tegtteeeae caacaggetg ttetgtattt
                                                                     1320
totaactott totocaattt ggacaaccoo toccatotto cototgaagt gtggggaaaa
                                                                     1380
agatteatet tgtgtegtet eeeteettea teaeeeteaa etgteaeagt gaaaetttta
                                                                     1440
tttggatttg tetgtttece gaaegggaea tgttteeetg atgeaagage tetggtettt
                                                                     1500
deceagitte acgaetggat atgitactae étectigeaa gatgetaace tecagetetg
                                                                     1560
gtgcagttcc cacggagcaa agcaaactcg actgaatcca agtgatctgt atctgccaaa
                                                                     1620
aaggagagga caagaaagct ggtcacttag ccgcctggct qttcacctqa cccctqqqqt
                                                                     1680
tgggtctggg gcgtgtctaa tcagccgaga tggtccctct gcttcttcaa gcatgagccc
                                                                     1740
aggtaaatto ccaggaatta ccaagacaag agcctgacaa agagccggag gtcttccgag
                                                                     1800
geggeteaga caaaceetta gacaacacaa teteegaaat etaaattta
                                                                     1849
```

```
<210> 5807
<211> 1278
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (219)...(889)
<223> similar to gi2384956 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5807
                                                                       60
ggcgcctgac ggaagcggcg gcagcgggca gcggctctcg ggctgcaggc tgggcagggt
cccctccac gctcctgccg ctgtctccca cgtcccccag gtgcgcggcc accatggcgt
                                                                      120
                                                                      180
ccagcgacga ggacggcacc aacggcggcg cctcggaggc cggcgaggac cgggaggctc
ceggeaageg gaggegeetg gggttettgg ceacegeetg geteacette tacgacateg
                                                                      240
ccatgaccgc ggggtggttg gttctagcta ttgccatggt acgtttttat atggaaaaag
                                                                      300
gaacacacag aggtttatat aaaagtattc agaagacact taaatttttc cagacatttg
                                                                      360
                                                                      420
cettgettga gatagtteae tgtttaattg gaattgtace taettetgtg attgtgaetg
gggtccaagt gagttcaaga atctttatgg tgtggctcat tactcacagt ataaaaccaa
                                                                      480
tccagaatga agagagtgtg gtgctttttc tggtcgcgtg gactgtgaca gagatcactc
                                                                      540
gctattcctt ctacacattc agccttcttg accacttgcc atacttcatt aaatgggcca
                                                                      600
gatataattt ttttatcatc ttatatcctg ttggagttgc tggtgaactt cttacaatat
                                                                      660
acgctgcctt gccgcatgtg aagaaaacag gaatgttttc aataagactt cctaacaaat
                                                                      720
acaatgtoto tittgactac tattatitto ticttataac catggcatca tatatacett
                                                                      780
tgtttccaca actctatttt catatgttac gtcaaagaag aaaggtgctt catggagagg
                                                                      840
tgattgtaga aaaggatgat taaatgatct ctgcaaacaa ggtgcttttt ccagaataac
                                                                      900
caagattacc tgagtccaag ttttaataac aagaataaac aactttgtga aatatcatgg
                                                                      960
attgtatggt ttcttaaaat ataacttgag acacgtggta tttgccagta tttgtgttcc
                                                                     1020
tettgtgeca gatetatttt ttacaagaae tgtgeaaata teagtaaett ttgggtaggt
                                                                     1080
attgattatt aggaaaataa ttaggtgtat tatctggggg aaaaaaaaac ttttgctaag
                                                                     1140
ttttttttga aacatgctca aagcttttta aatcaatatt tagaaattag tttaacgatt
                                                                     1200
tactattata cctgctagtg atatttatgt gatatctata aatgaaaata aatgcaaaat
                                                                     1260
tataccaaaa aaaaaaaa
                                                                     1278
```

```
<210> 5808
<211> 826
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (440)...(743)
<223> similar to gi3041844 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5808
tttcgggccc ggaaagattt aagtttcgtg aatgcatacg caagactcgg aggtagttcc
                                                                       60
ggttccggcg tggccacttt cgttggtggt gttcagttgt ggcggttgct ggtcagtaac
                                                                      120
agccaagatg ctgcggaatc tgctggtgag gagcttctca tcttgcatcc atgatggggg
                                                                      180
cgagggagtg gagaggaggc tgaggcacca cgacagaaaa ccctcacctg ggaggggtgc
                                                                      240
cgaaggcggc taatgaagtc accttgattc gtgtcctttt tccctgacct tactttccct
                                                                      300
teegtetatt cetetegeee eaggeegtta etgggtagat gtaaggagtg gagaggeagg
                                                                      360
ggaagtgacc agagactcgt gggttagacc cgtcttgggt tcttagtcac cacctctaac
                                                                      420
cctgtcggtc attgatgagg ctcttcgtca gattgggcag aggacgataa gcactgcttc
                                                                      480
ccgcaggcat tttaaaaata aagttccgga gaagcaaaaa ctgttccagg aggatgatga
                                                                      540
aattccactg tatctaaagg gtggggtagc tgatgccctc ctgtatagag ccaccatgat
                                                                      600
tcttacagtt ggtggaacag catatgccat atatgagctg gctgtggctt catttcccaa
                                                                      660
gaagcaggag tgacttcagt catcccagca atcgcttggt tcagtttcat tcagctctct
                                                                      720
atggaccagt aatctgataa ataaccgagc tettetttgg ggatcaatat ttattgaett
                                                                      780
```

```
<210> 5809
<211> 2568
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (317)...(2182)
<223> similar to gi4680645 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5809
ggcacgaggc gccctgcaga ttgtctcttg ttgcgtaagt ttttttgacc gtcactcgtg
                                                                       60
teagetteaa agteagatag atttttetee cageatgtte taetteegag getgtggeeg
                                                                      120
ttgggtcgcg gtttccttca ccaagcagca atttccgttg gcacggttga gcagtgacag
                                                                      180
cgcggcgccc cggactccgc acttcgacgt gatagtcatt ggtggaggac atgccgggac
                                                                      240
tgaggcagcc accgccgccg ctcggtgcgg ctctcggact ctgctcctca ctcaccgcgt
                                                                      300
ggacacgate ggtcagatgt catgtaatee tteetttggt ggcateggaa agggacattt
                                                                      360
aatgagggaa gtagatgcct tggatggcct gtgttctcgc atctgtgacc agtctggtgt
                                                                      420
acattataaa gtattaaacc ggcgtaaggg accagctgtg tggggtctga gagctcagat
                                                                      480
tgataggaaa ctctataaac agaacatgca gaaagaaatc ttgaatacac cactgcttac
                                                                      540
tgttcaggag ggagctgtag aagatcttat tcttacagaa ccagagcctg aacacactgg
                                                                      600
gaaatgeegt gteagtgggg ttgttttggt ggatggaage acagtatatg cagagagtgt
                                                                      660
gattetgaet actgggaeat ttetgagagg catgattgta attggattgg agacgeatee
                                                                      720
agcaggacgt ttaggggatc agcettetat aggattgget cagacactgg agaagttagg
                                                                      780
gtttgtggtg ggaaggttga agactgggae tecacecega attgecaaag agtecattaa
                                                                      840
tttcagtatt ctaaacaagc atataccgga caatccatcc ataccattca gctttaccaa
                                                                      900
tgagacagta tggattaagc cagaagatca gctgccatgt tacttgactc acaccaaccc
                                                                      960
tagagtggat gagattgtcc ttaagaacct tcaacttaat agtcatgtta aagaaacgac
                                                                     1020
aagaggacet egataetgae eetecattga atcaaaagtt ttgegtttte caaacegtet
                                                                     1080
acatcaggtt tggttggaac ctgaaggaat ggattctgac cttatctacc cacaggggtt
                                                                     1140
atctatgacg ctaccagetg agttacaaga gaaaatgate acatgeatea gaggettgga
                                                                     1200
gaaagctaaa gtgattcagc caggctacgg tgttcagtat gattacttag atccccgtca
                                                                     1260
gateaccect teettggaga eteatttggt teaacgaete ttetttgetg gacagateaa
                                                                     1320
tggcaccact ggttatgagg aagetgcage teaatgetet tgtagggtgt gatageegga
                                                                     1380
atcaacgcca gtcttcgggt cagtcgcaag cctccctttg tggttagccg aacaqaaqqt
                                                                     1440
tacataggag tettgattga tgaceteaet actetgggea ceagtgaace atacegeatg
                                                                     1500
tttaccagec gagtagagtt cegtttgtca etgegeeetg ataatgetga cageeggete
                                                                     1560·
acactgcgag ggtataaaga cgctggctgt gtgtcccaac aacgatatga aagaqcttgt
                                                                     1620
tggatgaagt cttctttaaa agaaggcatt tctgtgttga aatctattga gtttttgagc
                                                                     1680
tctaaatgga aaaaattaat cccagaggct tctataagta ctagtagaag tctgcctgtc
                                                                     1740
agageteteg atgttetgaa gtatgaggaa gttgacatgg atteattage caaggetgtt
                                                                     1800
ccagageeet tgaagaagta tactaaatgt aaagagetgg etgaaagaet gaaaatagaa
                                                                     1860
gccacttatg aatcagtgtt gttccatcaa ctacaagaaa taaagggagt tcagcaagat
                                                                     1920
gaagetetee aactgecaaa agaeetagat tatttgaeta teagggatgt gtetttgtee
                                                                     1980
catgaagttc gagagaaact acattttagt cgtccacaga cgatcggggc tgctagtcgc
                                                                     2040
atacccggag taacacctgc cgccatcatc aatctgctga gatttgtgaa gaccactcaa
                                                                     2100
cgaagacagt cggctatgaa tgaatcatcc aagactgatc aatacttatg tgatgcagac
                                                                     2160
```

```
agacttcaag agagagagtt atagctttca attcataaaa gatttttaa agagccatat 2220 aaataatttg gatcaatacc aacagtatag ataaaagaat tatttagcac atgttaaaat 2280 agcctttatt aggttaccta tgggtttgcc cattaatttc ctgagtggga cagaaattat 2340 aattgtgctt tttcgtgtat atgaaaaaac tagtcgtaaa caatttgtac tctttcttta 2400 aggagctgta atacaaataa ctttgtgcag tgttcatcaa agagagagac agtgaaccta 2460 aaactgaacc tggaataaaa ctcaacatgc agatttgcct actcataggg actttgccta 2520 ttaagtctac caaattaaaa gtcttatcat tcagaaaaaa aaaaaaaa 2568
```

```
<210> 5810
<211> 1409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (261)...(1103)
<223> similar to gi556868 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5810
eccaegegte egggttggtg etteetgtte geagetgegg caacagegte ttgecetgte
                                                                       60
gecaegetgg agtecaetge aaceteegea teetgggtte aageaattet eetgeeteag
                                                                      120
cctcccaagt agctgggact acgggagaag atggtataaa ctggtccatc agtgacaaag
                                                                      180
acattgaggc ccagatagct aataaccgaa cacctggaag atggacccag cggtactatt
                                                                      240
cagccaacaa aaacattatc tgtagaaatt gtgacaaacg tggtcattta tcaaaaaact
                                                                      300
gccccttacc acgaaaagtt cgtcgctgct tcctgtgctc caggagagga catctcctgt
                                                                      360
attectgtee ageceeett tgegaataet gteetgtgee taagatgttg gaecaeteat
                                                                      420
gtetttteag acatteetgg gataaacagt gtgacegatg teatatgeta ggecaetata
                                                                      480
cagatgettg cacagaaate tggaggeagt ateacetaae gaccaaacet ggaccaecea
                                                                      540
aaaagccgaa gacccettca agaccatcag cettagcata ttgetatcae tgegegeaaa
                                                                      600
aaggocatta tggacacgaa tgtocagaaa gagaagtgta tgacccgtot ccagtatoto
                                                                      660
cattcatctg ctactatgat gacaaatatg aaattcagga gagagaaaag agactaaaac
                                                                      720
aaaaaataaa agtactcaag aaaaatgggg ttatcccaga gccatccaag ctaccttata
                                                                      780
taaaagcage aaatgagaac ccccaccatg atataaggaa gggccgtgcc tcatggaaaa
                                                                      840
gcaacaggtg gcctcaagaa aataaagaaa cacaaaaaga aatgaagaac aagaatagaa
                                                                      900
actgggagaa gcacaggaag gctgacagac atcgtgaagt ggatgaggat tttcccaqqq
                                                                      960
gccccaaaac ctactettet cetggcagtt ttaaaaceea gaageettet aageeettte
                                                                     1020
accettcatc acattaccac acetcaagag aagacaagtc tcccaaggaa gecaagaggg
                                                                     1080
gcaagcagaa gaaaaaggag aggtgctggg aagatgatga caatgataac ttatttctta
                                                                     1140
ttaagcagag aaaaaaaag tettaageeg teaggeagee tetgatgtgg etttteattg
                                                                     1200
ttcatttggc ctttgtgtct ataaccttct ggcactgtgt ttattatcta tgattaaata
                                                                     1260
aagtgagttt ttggttttgt ttttttaatt tcagccattc ctagagttac tgaatatcca
                                                                     1320
tggagatete aattetetgt gtecaacagg atattaggta agaaagtaca aagataaace
                                                                     1380
tggacttctc ctattccaat atgtcatct
                                                                     1409
```

```
<211> 1612
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1613)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1173)...(521)
<223> similar to gi4128015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5811
ccttttttt ttttttacct aataaaaatc tttatttttt tattaaaaaa gaggggcgtt
                                                                       60
tggtagetat ttaaataaga ggggggggg aatgaatgte cagataegag cacetgeate
                                                                      120
ttttagtcaa ttgtcagtgg agtcagtggg gtgctaagtg ttctgaactg aagtaggtgc
                                                                      180
actaaggtte caagetteee tgeaaggate tggaegggag gaaaageaga ggeeeetgaa
                                                                      240
gggaaaaaag ccttgcttcc caatacttat ttttttatta ctgtgcaaaa gagcacactc
                                                                     300
tecetetttg tgteteteec acceaaegge acceececa ceeccaaece aagagggaet
                                                                      360
tatacatggg agtgcagggg acagagttga ccaggggggg cctttgtccg qcaccctqqc
                                                                      420
ccacaggetg agetcagece caggecettt caggeateta gacacteeca taageetgte
                                                                      480
agggtggggg gcaagggaga tcccaggggn cacacatact tccctggaag agttggactt
                                                                      540
aggggtaaga gegggggge aeggtaecea geettgetet eatteecagg gacagggaac
                                                                      600
aggagagcag tgcacctccc aggggatgga ctaggggcag acccttgccc agcccaatta
                                                                      660
aagatgggca ggggcaaact catacttaaa tgttggtagg gattcaaagg gttataaaaa
                                                                      720
gtotgtgaca atotgatggo coatacoagg agcaagotac caaagoggoa aagacotgoo
                                                                      780
acgatgaaaa attatgcctc cacccatggc tatacgggcc tttctttcac tttgtcgtct
                                                                      840
teccecacag egeggtgeae tteatgeece ategtggeea caaacatgge caggaageee
                                                                      900
agcaccaggg agaccaccat tagggctcga gtggcctgca agggccgcgg acagggcgag
                                                                      960
caccgagteg tacattttgc agetcateat eccegtgete tgegtgaege agtccateca
                                                                     1020
cageccettg tacatggeet gggeegtgat gatgttgtea eeegcatagg ageteatetg
                                                                     1080,
ccactgcggg atggcggtgc aggccaccag acccacccag cccagcaggg ccatggagaa
                                                                     1140
gcccagcaac tgcaggcccg aattggccat ttccgccctc agaaaacact gggggcgccg
                                                                     1200
ggcggggaga ccctacagta aaacaaacga cacttggggg gcagccccac aaaagaaaac
                                                                     1260
ttgaggtgga gttttccggt cacccaaaga gacaaaaagg gtttgggcca ggtgaatgca
                                                                     1320
aatettgtea eeaaactaca cacaaatega eeeeteeagt gaagegatgg eetegeggea
                                                                     1380
cagggagtag gatacgccgg gagggtggtt ccagacaaaa ttggtggtcc ccgaaggcca
                                                                     1440
ggcggttccc tccgggcgct ctcggcgacc ctaggcaaac aaaaggtgga ggggccgtct
                                                                     1500
gggcgcgttt ctgagcgccg gcaagtccca aagtatcctg ggctgtaggt ccgaggctgc
                                                                     1560
ggtgcgcagc agaggtgctc gcccggtccg gcgcgtgggc gacggaatcg gc
                                                                     1612
```

```
<210> 5812
<211> 3881
<212> DNA
<213> Homo sapiens
```

<220>

```
<221> misc_feature
<222> (1)...(3882)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3807)...(195)
<223> similar to gi36122 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5812

ttttttttt ttactatcta caaaaattta ttatatattt acagaagaaa agcatgcata 60 atcattaaac aaataaaata ctttttatca caacacagta catatttgtc atttttaaaa 120 agecacacaa tagaaacaag acaccaagat atttaaatta tettegttga etececeeng 180 taaaaatagc taaacactca tcattcgcgg tgcaattact cataggacat aagttcctgg 240 aaacaatagt ttggcatgcg taagggcatt cgcacccaaa ggaaatctgg ggttttattg 300 cgggcagccc ctggcatttc atatggtatg gggtcccggg tgttgggcca atcgccatta 360 attecacaaa ggattggcaa agcatggaac etggatatgg ggttetggat ggeetecaaa 420 ccaatcettt teccettaaa aactgggget ggetecatgg gggeaatetg gacaateteg 480 ttcccatttc ttcaaaaacg caggccacca ttcgggagaa ctaccctcca tggggctggt 540 ctattgaggg attggaatag gtccccctta gcacgaagag tgaaccttat ccatcccacc 600 atatgettea aaegetggta ataagtgggg cecaataaaa aategggatg ggattittee 660 gaccagtgaa acccattgta cagggacctc catttccctc ctgaagagga tagcccataa 720 tccaggataa aaagattagg aaaccttcct gccacgttaa acagcatcca ttaaaatgga 780 gtggcatcca cccaatttca ccccttgtta agcccgatac ccttcccctt qaaqqcattc 840 aattaagtga cccaatagtc atacggagag gggatgggca tggggattga tgatgatatc 900 agggggtgat accttcacag gtgaaaggca tatcctcttg tctatactga ataccacaag 960 taccettttg accatgtega etageaaatt tgteteeaat etgtggaäte etaacagage 1020 gtaccettat tttacaaaat ttatateett eetgattgag agttaceeat aacetgatga 1080 acaatgcccg tetegetagt tetgagaaaa gtgetacagt etettettgg tatageggte 1140 tattggtgct ctcccaaatt catcttcatt ttccaggcaa ggtgactgtt ttgcctataa 1200 taacatcatc teetgatace aegaaceeec tgggagetat caaaacenat catcatecag 1260 cttgtcgtaa atggcatgcg cgtcntgccc tggcatggtt cacqtqtaqq cttctcaaaa 1320 acttettett gateaaatee ttttttagae teetgttett tgtatgageg atagaaaaca 1380 gacctgaaga agccgcggtc ctacagctga acgattcatg ataacagagt cttccctgat 1440 tatateceag tgtatgatge aatggeeaca attgagttga tgeetgetgg eageteteta 1500 aatögtagat attocataga cogtgtagto acaagtggot tttgaggata atagagaaca 1560 tgggccaatg tgtccatgcg aacatggaag ttggtgatgt aaactcccat aqcctqctta 1620 cccatagcag actggtatgt gtttctaggg gactggttat gatcaggaaa qqqaataata 1680 gatgcacaga caccaaggat cattgaggga tgaatctcac aqtqtqtata tqtqqaacaa 1740 taagctactt ctttctcctg taaatcatct ggagtcattg caagcatcac tgtttcttct 1800 tccagggtat caatatactc cactacccca ctggccacaa gatcctgcca actatagttg 1860 ttatattete tetettteaa ttggteaata tgeetettet teaaaagtag ettttgtttt 1920 tecacaatea gaagtggtet acaaataegg eetgeateeg tatagateeg aateteeete 1980 totogaatat ototgatoat agaaacttoa gacacaatga tgtocatotg acgtotcaat 2040 ttccttaggg tgttcataag ttgttcggga tctttatgta ttccaaccca gcagccatta 2100 acaaaaatct tggttgcatc agcaatagct gcaggagaaa tttcttctaa attttccata 2160. ctccattctt ctaaaaattc cagaattgga gatggttgag atccaactga aatatacgcc 2220 atcaaggeta aattetteac aagteetaca geatggeeet etggggtete ggeaggaeac 2280 accattecce acaacgtatt atgeaactgt cttggttttg ctagettgec gtetetacca 2340 ataggagaat ttaaacgacg caggtgagaa agagtagacg caaaagtcag gcggtttaac 2400 acctgagata ctccagctct ggcttgatga gctttctttt gatcacccca gtttccagta 2460 gctaaagagt attttaggcc atcagatatg atccgtgttt taattgccaa ctccaagtta 2520 aaatcettte etegateaat aaatttetgt geatagatee geaettettt aageaaatte 2580

```
ttaaacatac ctctaaataa gaatgcaagc agcggcccag caagatccaa tctcttgttt
                                                                     2640
ccatagtgat ctctgtcatc tagttctctt ctacccaaag ctgccagaag taacctatga
                                                                     2700
accatgtatc ccaagaaata ggcttttttg gtctcacaaa aatcactgac accaacatga
                                                                     2760
gggagcattt ctttttgtaa aacttccttt gcatatttaa ttcttttctc tttagtaaca
                                                                     2820
ccaggetttg etectettga accaatgaaa tttagtgeaa cattetgtte ttggatgaea
                                                                     2880
aaagcttcat cgagagaagg tttaaccatt tccatcatct ctggatcttc aaaatcataa
                                                                     2940
ataatatgtt ctaaaatatc tctgtcggac acaaaaccta atgctctgaa cacaataatg
                                                                     3000
atgggaactt cttgcttgat atatggtaga gttgccacaa tgcgctgacc aatagcactc
                                                                     3060
                                                                     3120
ttettggeae cetgteetee tettgeeage atgetaacce atatagtaet ggtgggtegg
gaagaattct caagacatga tctacactct cctgtgtagg catatttaga atcctttttg
                                                                     3180
gcaaacacat aaactgtgtt tgttgccatt ttctcttggg caatcagaac cttttctgat
                                                                     3240
ccattaataa tgaaatagcc accaggatcc aaagggcatt catttaactc acaaagatca
                                                                     3300
cgatctgtca agccattcaa aaggcagtaa gttgaccgca acataattgg aatttttcct
                                                                     3360
ataaaagttt tetgatgetg agtetgaagt tgttetteae ettetttaat gaetgttttt
                                                                     3420
gttatatcaa cataaagegg agcagaatac gtgagattcc ttaatctagc ttcattgggc
                                                                     3480
                                                                     3540
atcattggtg aaggagcacc atctctttcc caatgggtag gcttggaaag ataaatttgt
tcaaacttca gcaaatatcg tggcggttct tcaacttctc cactagcatg ctgagcttca
                                                                     3600
gcctgtaggt ctataggagg agcgtcttcc acaattcttt gaacagacat ctgaataaac
                                                                     3660
tcatcaaaag aatccagctg ttgtctaacc aagcctttct cgtcaaaata ggaactgatt
                                                                     3720
acaatccage atgettettg ccacaaatcc ggggtgattt catcatcatc ctcatcatat
                                                                     3780
tgcatatect cateegegte gtacatattg ccaaaeggtt etegagetee taactettga
                                                                     3840
aatcaaaaga caaaaaccgc ccagaagcca gcagcgccag g
                                                                     3881
```

```
<210> 5813
<211> 1678
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (305)...(1190)
<223> similar to gi4929603 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5813
tecagegeee egeacegggg cegttagtea geagaacgeg agetettgtg gaggageagg
                                                                       60
gceggegega ggegagaete gggagegtga geggggeeee tggggegeeg cegteettet
                                                                      120
tegeceegge geeggggget agtagecatg gteeeegete etetgteggg eeagtetgea
                                                                      180
ggcggagaga gtcggacggc gcccggagcg cggatctcgc cttgtggagg acagcgcgtc
                                                                      240
ggctgcggtt ctctctcgac cccttctgcc cggcgcttcg gcccgggccg ctcaggtgca
                                                                      300
gageatgaat aatettteat ttagtgaget atgttgeete ttetgetgte cacettgtee.
                                                                      360
agggaagatt gcttcaaaat tagcgttttt gccacctgat ccaacttaca cactgatgtg
                                                                      420
tgatgaaagc ggaagccgtt ggactttaca tctgtctgaa cgagcagact ggcagtattc
                                                                      480
ttctagagaa aaagatgcta ttgagtgttt catgactaga accagtaaag gcaacagaat
                                                                      540
tgcttgtatg tttgtacgtt gttcacccaa tgcgaaatac actttactct tctcacatgg
                                                                      600
aaatgetgta tgatettgga caaatgagea gettttaeat aggaetagga teaeggatta
                                                                      660
attgtaatat atteteatat gattattetg gatatggtge cagtteeggg aaacceaeag
                                                                      720
agaagaacct ctatgcagac attgaagctg cttggcttgc tcttaggaca agatatggca
                                                                      780
ttcgccctga aaaagtggat taaatatggc caaagtatag gggcagtacc cgtctgtgga
                                                                      840
tcttgctgct cgatatgaga gtgctggcgg taattcttca atcccctctg acttcgggaa
                                                                      900
```

```
tgcgagttgc ctttcctgga taccaaggaa gacctactgt cttgcatgca ttcccaaaca
                                                                      960
ttggacaaaa tctcttaagg ataacctctt ccagttattt aattaatttc atggggactt
                                                                     1020
gaaggatgaa gtcctttgga ctttttcaca tgggcctcgc atttgtttgg aacgttggcc
                                                                     1080
caaagacctg tggagcctct ctgggttgaa ggagcaggtc acaatgatgt ggaactttat.
                                                                     1140
ggacagtatc ttgaaaggtt gaaacagttt gtgtcacagg aactggtaaa tttgtaaaat
                                                                     1200
attotgtaaa tttgctactg ggttttcctt tcttgctgaa ctgcactctt tggtaaataa
                                                                     1260
cataaaacct gaaggttttg tttgcaaatc atgtcagttg ccttcataaa tgtacaggta
                                                                     1320
atgatttgtt aacagactta atgaaggttt taattaccag aactaaaaac tggaaataac
                                                                     1380
agtaccgtgc agtcaggctg tgtaatttat attitttctg tgaatttttt tttaacatca
                                                                     1440
agatgagtac tgtatgagat tttgattcta taaaatcaaa tgctgtaaaa gtattgccaa
                                                                     1500
atgettttge atactagaga cagatttata aatatttttg agacatetea atatattaga
                                                                     1560
tettateetg gaatacaact gtgcatattt tgagagaage tatgtatetg caggeacttt
                                                                     1620
cagtactcat aatggaatga actctaaaag cagatttgac accatgcgag ttcactag
                                                                     1678
```

```
<210> 5814
<211> 2007
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (416)...(1792)
<223> similar to gi3327974 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5814
tgaatteegg ggatgggate eggeteetee agetaeegge ceaaggeeat etaeetggae
                                                                       60
ategatggae geatteagaa ggtaatette ageaagtaet geaacteeag egacateatg
                                                                      120
gacctgttct gcatcgccac cggcctgcct cggaacacga ccatctccct gctgaccacc
                                                                      180
gacgacgcca tggtctccat cgaccccacc atgcccgcga attcagaacg cactccgtac
                                                                      240
aaagtgagac ctgtggccat caagcaactc tccgctggtg tcgaggacaa gagaaccaca
                                                                      300
ageegtggee agtetgetga gagaceaetg agggaeagae gggttgtggg eetggageag
                                                                      360
                                                                      420
ccccggaggg aaggagcatt tgaaagtgga caggtagagc ccaggcccag agagccccag
ggctgctacc aggaaggcca gcgcatccct ccagagagag aagaattaat ccagagcgtg
                                                                      480
ctggcgcagg ttgcagagca gttctcaaga gcattcaaaa tcaatgaact gaaagctgaa
                                                                      540
gttgcaaatc acttggctgt cctagagaaa cgcgtggaat tggaaggact aaaagtggtg
                                                                      600
gagattgaga aatgcaagag tgacattaag aagatgaggg aggagctggc ggccagaagc
                                                                      660
agcaggacca actgcccctg taagtacagt tttttggata accacaagaa gttgactcct
                                                                      720
cgacgcgatg ttcccactta ccccaagtac ctgctctctc cagagaccat cgaggccctg
                                                                      780
eggaageega cetttgaegt etggetttgg gageeeaatg agatgetgag etgeetggag
                                                                      840
cacatgtacc acgaectegg getggteagg gaetteagea teaaccetgt cacceteagg
                                                                      900
aggiggetgi tetgigteca egacaactae agaaacaace cettecacaa etteeggeae
                                                                      960
tgcttctgcg tggcccagat gatgtacagc atggtctggc tctgcagtct ccaggagaag
                                                                     1020
ttctcacaaa cggatatcct gatcctaatg acagcggcca tctgccacga tctggaccat
                                                                     1080
cccggctaca acaacacgta ccagatcaat gcccgcacag agttggcggt ccgctacaat
                                                                     1140
gacateteae egetggagaa ecaceaetge geegtggeet tecagateet egeegageet
                                                                     1200
gagtgcaaca tettetecaa cateceacet gatgggttea ageagateeg acagggaatg
                                                                     1260
atcacattaa tettggecae tgacatggea agacatgeag aaattatgga ttettteaaa
                                                                     1320
gagaaaatgg agaattttga ctacagcaac gaggagcaca tgaccctgct gaagatgatt
                                                                     1380
ttgataaaat gctgtgatat ctctaacgag gtccgtccaa tggaagtcgc agagccttgg
                                                                     1440
```

```
gtggactgtt tattagagga atattttatg cagagcgacc gtgagaagtc agaaggcctt
                                                                    1500
cccgtggccc cgttcatgga ccgagacaaa gtgaccaagg ccacagccca gattgggttc
                                                                    1560
atcaagtttg tcctgatccc aatgtttgaa acagtgacca agctcttccc catggttgag
                                                                    1620
gagatcatgc tgcagccact ttgggaatcc cgagatcgct acgaggagct gaagcggata
                                                                    1680
gatgacgcca tgaaagagtt acagaagaag actgacagct tgacgtctgg ggccaccgag
                                                                    1740
aagtccagag agagaagcag agatgtgaaa aacagtgaag gagactgtgc ctgaggaaag
                                                                    1800
cggggggcgt ggctgcagtt ctggacgggc tggccgagct gcgcgggatc cttgtgcagg
                                                                    1860
gaagagetge cetgggeace tggcaceaca agaceatgtt ttetaagaac cattttgtte
                                                                    1920
actgatacaa aaaaaaaaa aggaattcat gatgctgtác agaattttat ttttaaactg
                                                                    1980
tcttttaaat aatatattct tatacqq
                                                                    2007
```

```
<210> 5815
<211> 443
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (364)...(10)
<223> similar to gi1712 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5815
agggtatgag ttttgtactt ctttcataag tttattccta atcatgttat tatttttgat
                                                                       60
agtattgtaa atgaaattat ettaatttea tatttggatt gtteatteea agtatataga
                                                                      120
aatacaactg atttttgtat attgatettg tactetgeaa eetgetgaae ttatttgtte
                                                                      180
caatagtatt ttaatgaatt ccttaggatt ttctacatag aaaatcgtat catctgtaca
                                                                      240
tagagatagt tttccttctt ccttcctaat ttagataact attattattq tcatcqaqat
                                                                      300
cttgcttaat tgccctgact agaacctctg gtacaatgtt gaatagaagt agcaagaatg
                                                                      360
gatacettgt ettgtteetg gtettagggg aaaageatet agtettteae cattaataat
                                                                      420
gttgtcagct ttggttttct ata
                                                                      443
```

```
<210> 5816
<211> 2756
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1464)...(2694)
<223> similar to gil262433 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5816 ttcatattaa aaaaatagct ggtaaatctt tctaggtagt aacttatcca aacaatactt 60 tgagtatcat attttgtgaa tgacttgctt aaactgggaa actgaatatt ctttttaaat 120 catataattc ctgtattaaa tgtgaaacac acagtctcca aagtcacctg attctctgtg 180 gaaaatgaaa ggcattgaag gaaaccagat acattaatac ttagttttgg ttgaaagtgc 240 aacattactg tacttagaag gggcttggtt tatttttaga tatttaagct atcattaatt 300 ttagaccaat ggctaataat aagagagatt tttggttgct catttatgga gagacaaaga 360 acagcatggc ataaacaaac atcccagaaa taaatgaaaa gttttaagtg ataaaattgt 420 gttttctatg aaccagtgtt gtacatgaac caacattgtg tttcttagct ctgacctgta 480 cagtgaggta cctgtcagga cccctagtct tggcactgga aatgacaaag ttctcctatt 540 actaaattct catgccttcc cttttctgac ttaagtagat tgaaattggt aggtaccaaa 600 tgatttatgt ttgataaact taagttctgc tgatatcctg ttactggtaa ttctggtacc 660 aaaatttcaa acggtttgat tattagtagc attttgagta cctaggtgca tataatacag 720 ttagcagacc cttacagagt caaaagagat tttggaatct ggtgatactg ttgtttatta 780 cactagecta ttacatttte tttetttata ataactgttt atgtgagttt cattgaaaat 840 cgtggctcta ttgctttatt catggtttcc acaactcttt ttgtaacacc ttaattttct 900 ctcttaggta ttttcctgtt aaataagata tcaaaagcat caatcacaag acagagaaaa 960 cgtattagga aaaacttgta ttagtatatt ctaaactgaa atggaaaaac tcattattca 1020 tattttaata aataaaactc ccaaatgatc ttgctaaatt atcccactat ttagaagtag 1080 aaaataagag aagagtgett teaaggaaat ttgteatatt eteeetteta tetagaagtt 1140 gacaatgaat tgcaataaaa ctaagaaata actgaatgct gaaaaatacc atgaattaat 1200 gttatggett etttattttt gtatateeat teecacaaaa ttgaatttaa gättattaat 1260 gaaaattcta tattaagtaa taatgcttgt attagtaatg ggcaaagaag tctttctttg 1320 ttacattaac cgttagtaaa agatgtactt tgacatttct gatgtaaaac ctatatgtaa 1380 atattgtaat ttaaatatga ttggacaget gttaagtttt ggggagggaa gcagatgeca 1440 gegttetetg etgaaaagae aagatggege ttgaeggaee acageagatg gagetggagg 1500 aggaaaaggc aggcagtgga ctctgccagt attatctgtc caagattgaa gaactccagg 1560 gtcaactgca atataaattg gatgggggaa agccacaagg aacagttctg aactccaggt 1620 gcatttgcag ctgattttga atgataagac ccaaaacctc tggaggcggc aggtgcacgg 1680 gaatgaacta aatgttaaag tgtgcctatt acaggaggag ctacagctgc tgcaggaata 1740 ggactcctgt gtcagggaag tagtccaggc catgggtaag aagaaagtgt tggtcaaggt 1800 gcatctcaag gacaagtttg tcatagatgt ggacaaaaat atcagcatca gtgatgtgac 1860 acccagttcc ttggtggttc taagaaatga cagetacact ttgcacaaga tcctacccaa 1920 caaggtggac tcattggtgt cactgatgat ggtgaagaaa gtaccagatt cagcttatga 1980 aatgattggt agactggata ggcagatcaa gaagatcaaa gaagtgatcg acctgcctgc 2040 taagcatccc gagctcttca aagcactggg cattgcacag cccaagggaa tgctgcttgg 2100 aagagactgt tggcctgggc tctggctcat catagggact gtgtaccttt attcatgtct 2160 ctggctctga attggtacag aaattcattg gggaatttct gtgatggcag agaaaatgct 2220 catctgtcat cttcatggat gaaattgact cttttggctc ctcagagctg gagggggatg 2280 ctggagggaa cagtgaagtg cagcagatga tgcttcgagg gtggctttga ggccaccaag 2340 agtatcacgg tttatcacgg ctgctaatac gattgatatc ctggactcgg cactgctttq 2400 cccagggcac attgacagaa aaattgaatt cccaacctgc aatgagtagg cctggctggt 2460 cactttgaag attcattctc agaaatgaac ctgacccagg ggatcaacct gagaaaaatt 2520 gctgagctta tgccaggagc atcaggctga agtgaagggc atgtgcacag aaaccggcat 2580 gtatgccctg agtagcgagt ccatgtcact cagaaggact ttgaggtagt ccaaagtcct 2640 atctcatgcc aaaggacagt gaggaaaaac atgtccatca agaaactatg gaattgaggg 2700

2756

cacateettt gtgtgtatee etacaataaa acteagtggg acaageaaaa aaaaaa

<210> 5817 <211> 2356

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (393)...(1989)
<223> similar to gi4928697 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 5817
tttacegget egaegattte gteecaggea eegeaceggg eagteteegg atetgeegtt
                                                                       60
ctgccccggc ccggaaaacc cggcgccttc caggcccttc gaaagatgga ttctgttgac
                                                                      120
gtatetggeg geeetggega geetggtgga aagttgggtt ttgeeagatt gegeegget
                                                                      180
cetetttgtg acgegegee ageceegeat eteceeegga geeggatgge catgaaatea
                                                                      240
catctcagca catgcctttg actctggatt gcacatgtat tcattagctg aagcccaatt
                                                                      300
ttaaaatcca atcaactcta tgattccttg aaatgactgc aaatcaagtc acatccagtg
                                                                      360
ctecteagge caagtggeat cagagetgag tgatggaega cetgeagtee cagaacetet
                                                                      420
ccatggacat gactgactcc cctcctgcct tggctaataa cagactggag aatggcatgg
                                                                      480
ctcagctgat caccaccgag gcctggaaca\tcaactccac tgacctggta aagaaggccc
                                                                      540
tggtgaccgt gccagcccca tccattctga acccccctgc cgagtctcag agtggcatgg
                                                                      600
ctctgaaggt ggcggccact gtgttgcagc ccctgtgcct cggggagagc ccagtggtga
                                                                      660
tgcccattca catgcaggtg gagggaagct ccgcaccaga gctcaatccg aatggcaatg
                                                                      720
ceacctacgt catgaccacc cagggccccg tgcaactgcc cgtggtgctg gagcagcacg
                                                                      780
tettteagea ceteaactee cetetggtee tgeegeagga ggeeceatge teeteeaqta
                                                                      840
ccatccacaa caacctette cagggagegg aggaceeega ggeeeageee cageteetgg
                                                                      900
acctgaggat ccccagccag ccgcaggagc ccactttgcc atttgaagct gtgctccaga
                                                                      960
attigitude eteccaggge acteteggge coccaceetg teagecteet eetggetatg
                                                                     1020
cccctgtgcc cccacagect tttagetecc ccttgtcccc cctggtccca ccagecaccc
                                                                     1080
tettggtgcc gtatectgta ategteceet tgcctgtgcc agtecetatt cccatececa
teceggtgee teagagttet gaateeaagt teageteeag titteeceaag ceaceatett
                                                                     1200
cetteggeet geacceettt aaaggeacce agacceetet ggaaaaagat gaactgaage
                                                                     1260
cetttgacat cetecageet aaggagtact tecageteag eegecacaeg gteattaaga
                                                                     1320
tgggaagtga gaacgaggcc ctggatctct ccatgaagtc agtgccctgg ctcaaggctg
                                                                     1380
gtgaagtcag tcccccaatc ttccaggaag atgcagccct agacctgtca gtggcagccc
                                                                     1440
accggaaatc cgagcctccc cctgagacac tgtatgacag tggtgcatca gtggacagct
                                                                     1500
caggicacac agigatggag aaacttccca giggcatgga aatttctttt gcccctgcca
                                                                     1560
cgtcccatga ggccccagcc atgatggata gtcacatcag cagcagtgat gctgctaccg
                                                                     1620
agatgeteag ceageceaac caceceageg gegaagteaa ggetgaaaat aacattgaga
                                                                     1680
tggtgggcga gtcccaggcg gccaaggtca ttgtctctgt cgaagatgct gtgcctacca
                                                                     1740
tattctgtgg caagatcaaa ggcctctcag gggtgtccac caaaaacttc tccttcaaaa
                                                                     1800
gagaagactc cgtgcttcag ggctatgaca tcaacagcca aggggaagag tccatgggaa
                                                                     1860
atgcagagee cettagggaa accecateaa aaaceggage ataaaggtta aaggaaagtg
                                                                     1920
aactcccagg aaataccaca tgctcccaat caaaaaacaa cggctggcca ccttttttcc
                                                                     1980
aagaaagtaa ataacggctt tttaaaattt gtatgattat aatatgggga aaggtgcatt
                                                                     2040
ggttttataa aaaggcattt aaaacaaatt atctttgtta attattttgg ggagtagttg
                                                                     2100
ggaaatggaa aggtgaattg gctctagagg ccctgtatgc tagtatcatt ttcttttta
                                                                     2160
attittgact titcacaaat gagtaaataa gagcaaccta titticaagc agattgcaca
                                                                     2220
ttttttgcag ctttaatgga atattgggtg aattagaggg gtaaaaaagc tattttcatt
                                                                     2280
gccacaaagt gctttgatga tgtaatacct aataaagggt aggatgaata tttcacaata
                                                                     2340
aatgtttgtt tgcact
                                                                     2356
```

<210> 5818 <211> 1928

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1393)...(1106)
<223> similar to gi4455160 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5818
geggeegege ggeeteeegg gegggeetae ageeatgtee egggaeeegg ggtegggegg
                                                                       60
ctgggaggag geocegegeg cagetgeege getetgeace etgtaceaeg aggeeggaca
                                                                      120
geggetgege egeetgeagg accagetege tgeeegegae geeeteateg etegeeteeg
                                                                      180
egecegeetg geegegetgg agggggaege egegeegtee etagtggaeg egetgetgga
                                                                      240
geaggttgeg egetteeggg ageagetgeg aaggeaggag ggeggegeeg eegaggeeea
                                                                      300
gatgcgccag gaaaattgag aggctgactg agcgactaga agaaaaagag agggagatgc
                                                                      360
agcagetget gagecageee caacacgage gagagaagga agtegteetg etaeggagga
                                                                      420
gcatggcaga aggggagcgc gcccgggccg ccagtgacgt cctgtgccgc tccttggcca
                                                                      480
acgagaccca tcagctgcgg aggacgctga ccgccaccgc ccacatgtgt cagcatctgg
                                                                      540
ccaagtgtct ggatgaacga cagcatgcac aaaggaatgt gggggagaga agtcctgacc
                                                                      600
agtoggaaca cacagatggg cacacctotg tocagagtgt tattgagaag ttgcaggaag
                                                                      660
aaaatcgact gttaaaacag aaggtgactc acgttgaaga cctcaatgcc aagtggcagc
                                                                      720
getacaacge cagcagggac gaatacgtga gggggeteca tgcgcagete agggggetge
                                                                      780
agatececca egagecegag etgatgagga aggagatete eeggeteaac agacagttgg
                                                                      840
aagagaaaat aaatgactgt geegaagtga ageaggaget ggeggeetee aggaeggeee
                                                                      900
gggatgetge gttggagegg gtgeagatge tggaacagea gatteteget tacaaggatg
                                                                      960
acticatgic agaaagggcc gatcgggaac gggctcaaag taggattcaa gaactggagg
                                                                     1020
aaaaggtege etettigetg caccaggigt cetggagaca ggattetega gagecagacg
                                                                     1080
ceggeeggat teaegetggg ageaaaactg ceaagtattt ggeegeegae geattaqaqe
                                                                     1140
ttatggtgcc tggtggctgg aggectggga ctgggtccca gcaqccaqaa ccccctqcaq
                                                                     1200
agggegggea teetggegeg geecagagag geeaggggga cetteagtge ceteactgee
                                                                     1260
tgcagtgett cagtgaegag caaggggaag ageteeteag geatgtggee gagtgetgee
                                                                     1320
agtgacegag acteaceegt gecettgegg ceteetggee eggtgeaget geeeteaggg
                                                                     1380
acagggtggg tgctctcaga tgccatgggt tgagctctac tgagagccaa ggcccctaga
                                                                     1440
atagttgegg ggeactetga tegtteaett tggteeettt ggetatggaa caggetgggt
                                                                     1500
cacagggaac tgccagtgag gctggaggct ggaggtggag atggggtcag gaacatctgg
                                                                     1560
cagagggagg teccagtetg tgtetecate aggettaage cagagetate tggtgetggt
                                                                     1620
gtgccagecc ctcccccage ctgcctagaa aggggtggct gcctgaggga gtcacttgta
                                                                     1680
tggtccccag ggtgggagcc ccatcctgtt ctatggaata aagcgtcgcc tctctgcctc
                                                                     1740
gaaccagtca aatggagtat tgcggctgca cgtcacacta gggtggccac ccccgccatt
                                                                     1800-
gcgagccaca tgtctgcact gagaaactgc atttcagtag catttgtcat ccagccggaa
                                                                     1860
gttaaagcac acttacttta ttcacctatt tttataataa acgttcttgc tgctgtgaaa
                                                                     1920
aaaaaaa
                                                                     1928
```

```
<210> 5819
<211> 465
```

<220>

<212> DNA

<213> Homo sapiens

```
<221> misc_feature
<222> (1)...(466)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (77)...(436)
<223> similar to gi3170965 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5819 nttgttgacg tecctagtee agngeggtgg aatteateec teccetacag aageeeceag 60 agegeageac cteaceatgg actgeacetg gaggateete ttettggtgg cageagetae 120 aggeacecae geceaggtee agttgttaca gtetgggtet gaggtgaaga ageetgggge 180 ctcagtgatg gtctcctgct acgtttccgg atacaccctc actaaattat ccatgcactg 240 ggtgcgacag gctcctggaa aagggcttga gtaaatggga ccttttgatc ttcaagatgt 300 tgaaacaatc tatccccaga agttccaggg cagagtcagc atgaccgagg agacatctac 360 agagacaacc caacctacct ggagttgagc agcctgagat ctgaggacac ggccgtgcat 420 cactgtgcaa cagacacagt gtgaaatccc ccagcctgag agcgt 465

```
<210> 5820
<211> 1605
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (800)...(1430)
<223> similar to gi2828151 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5820
aatacaaaag ttagccgggc atggtggcac gtgcctttgg tcccagctgc tcgggaggct
                                                                       60
gaggcaggag aattgcttga acccgggagg cggaggttgc agtgagttga gatcgcgcta
                                                                      120
ctgcactcca gtctgggcga cagagcaaga ctccctttcc aaaaacaagc aaatgaaaaa
                                                                      180
atagagtttt ctctatcaca caaatgggaa ggtttgtatt gaatgttata tttatcctct
                                                                      240
atccagtett gtettggåge acaaageaaa aaggeecage atceteeaet atettetgaa
                                                                      300
aacttgccct caggcctgag caagagggct gcccggttgc ttccatgtag ccaqccaqca
                                                                      360
tatgtgcagg gccaagtcta gagggaggag ggggtggcac atggatggtt tcgtttaatt
                                                                      420
ggaagacagt gggtagattg gagctggcat ttgaagatgt tgagagttgt ggatcatggg
                                                                      480
caagaaaagc gctgttctgg gactgcgggg caggagaagg aaactgatgc ttctgagggt
                                                                      540
gagtctgatg agataacatg cctgtgtgtg ggcctcaggt tagacagtgc tgaggtctcc
                                                                      600
cgtcactggg catccagctg ggtgctacgg ccgtggctcc tgccttctgc agccctgtca
                                                                      660
gggcccaagg cettececat cagcacttge tecaqeetae teactqqaqt tqtqttetqq
                                                                      720
gtgggtgtgt agaatactcg cactcctact tggggcatca gggagctctc tagcaatttc
                                                                      780
ttctgcacct agggagagcc cactgctaaa aaaggcctag tcaaatcctc aggtqtacat
                                                                      840
ggacatcaag attgggaaca agccggctgg ctgcatccaa accctcctgc gttccgacgt
                                                                      900
```

```
cgtgcccatg accacagaga attttctcta catgtgcacc catttaaagg actcggcttc
                                                                      960
aagggaagca gcttccaccg cattatcccc cagttcattt gccagggcag tgatttcaca
                                                                     1020
aaccacggtg gcaccagggg totgcgcagg catggcacta agtgtcccat ggcacatttg
                                                                     1080
geocteatgg aggeoteaaa agggeaggae cageaceete ttetaeggag gaaggaaegg
                                                                     1140
gcacagcagg gtgagccact gcgcctgatc aaggcatcac cgttgaacct cctaagagga
                                                                     1200
aaacataagg ctgtgcaata ccaggaactg ggattctagg ttgccccaga caccaaggca
                                                                     1260
tcaaaagcca ggggatccag agaaaacaca gacagccaag agagaaactg cgggaaaaag
                                                                     1320
ccaaaaggtt gagagccaca ccatctagaa gcttcctgcc tgtggtgcgg cacagaaaca
                                                                     1380
aggagagtca gcaattacca gccagccaag gtcctggaag ctgacgtaga gctcgtgccg
                                                                     1440
                                                                     1500
acggcagacc tgccggccgt gggagccgcg gacgtcatct gcagggacag aaggggcaag
                                                                     1560
gtettttetg gggtteetge tgtgtgeage tactatgggg taccagggtg ggggatgee
                                                                     1605
tgatgagcac atttgtcaaa taaatgaatg acaggaaaaa aaaaa
```

```
<210> 5821
<211> 1503
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (145)...(608)
<223> similar to gi871830 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5821
cctggaggga ggcaggaagg gtggacacgc ctgtgtgggt gatgggcaga ggggacctct
                                                                       60
cetteetgte teectegage eeggageate teteetteet gteteeagga etacagtatt
                                                                      120
gacgaggagg ccgccttcca ggctgctctg gccctgtctc tctctgagaa ctgaagggaa
                                                                      180
gegeageeae eegeetgegt etggggteag ggatgteeee geteetgtgt egeaeetgge
                                                                      240
acctgctcgg gagcgcacct caccggactg agctcacagg aggagcctgc acccgcgcag
                                                                      300
aaggggagee ggggeegage eteegggeet gaataeggge eageegeega ggeegeeaga
                                                                      360
geagggeege etggteeeae eggegteget gggttetteg gtgettetgg eegageagge
                                                                      420
ggcctacttg ggcagggctg gacgctggga cctggagctg ccgccgtctc ttcaaagcca
                                                                      480
tgataccccc tcgtgggaag aagggaccga cgcgcgagtc gcgctccgca gtcgagccgg
                                                                      540
gaggaaccca ggctgctgcc ctgcccagcc cgaccctgcc ccggccccgc ttccaccttg
                                                                      600
cgcatttggt actggctttt gtgatactta ggaaccctgg catcttttct atattatcca
                                                                      660
gtgtgataat cttttcacgt tttatagagc aaagacagag cagttactct tcatattgca
                                                                      720
atatctgtgt ttgactagga ataatagtat ttttatggaa catttacaaa attatatttt
                                                                      780
ttaagaaaac aatcaaaaca agcattgggg gattggggca aggatggaag gagcagtggg
                                                                      840
gcagctgcca gagctcaggc gagccatggg gtctgctgtg gggtctgccc tggccaccca
                                                                      900
ctgtgtgtct gggtccttga ggtttgtacg tttctctttg atgaccagga agaaatccca
                                                                      960
gcaccccagc cacaggctgt ggctgctccc agcagaggcg gggccggcag agaaggggcc
                                                                     1020
tectecacee agagteetgg cettggeeeg etgteacett caaagetgae tgtgeeeege
                                                                     1080
tgcgggaggg gacggcaccc cagtggtggc agagcttggg ggcctgggca ggggcccgct
                                                                     1140
tggcgggccg ggcaacacgt caacattctt ttctgttctt ggcattaatt attgctgtct
                                                                     1200
ttttttaaaa aaaaaaagtt taaataaaat gtctcagagc atcaaaaaaa aaaaaagggg
                                                                     1260
gggccctttt aaaagaaccc ttggggggcc caaatttaac gggggttgga aaggtaaaat
                                                                     1320
ttttttcttt atggggggcc atttaaaacc ctccttggga tttttggaaa agaacctttt
                                                                     1380
ttttgggggg ggaaaaaatt ggcccaaccc cccccaaaa tttaaagcct taagggaaaa
                                                                     1440
aaaaaattti taaggggaaa agggggaaaa acaaccggaa taccctggct gttaaaaaaa
                                                                     1500
```

```
<210> 5822
<211> 1945
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1192)...(263)
<223> similar to gi2749982 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5822 ttttttttt ttatctgtat gaaatattag ttttaataaa acagaaccag tccatgtatg gaggcatggg cataaggtca acttgcacta aatgtaactc gtacgttttt tctaaaataa 120 tttcttgagc attgtggtgg ccttatgtac taacccgaag ctgaacttcc tgggaagctg 180 atccaatgga gcacttggaa ttcaggggtg gagtcttctt cctgggtcag agctggttca 240 gggtcacatg ctcttgaggt ccctaaaggc cacatgtgct gcatttcgcc cagcagctcc 300 catcacacct cctccaggat gagccccact tccacagaga tacaggccct ggagagggca 360 geggtageca gaatgeaggg geaeggggeg ggegaagtag agetggteea gggaeatgge 420 gcagtggaat atgttccctc caggaagccc gaagattctc tccaaatctg gtggtgtgag 480 gatgtetetg ceaaceacag agteettgaa gecaggggea tagacetega tgeaateaaa 540 cactgtggga aggcaggcca tccatggcat cttcaaaggc ctgatgaagg aggagggtgt 600 cttcacagtt caggtggatg gagcattggt gatggggcag cggctggccc ctgggagcat 660 tgggggccgc caggaagctg ggcagcctgt ctacggccac ttctgaccag gctgcagggg 720 gacacagget ggaggteegg gaatggagat gatgaetgag tteagetgee eecageetgg 780 aggittetea eteagatggg teaaaggaga eagtgetgea atgiggtgtg eetettacea 840 ttgatettgg tgacaggéga cegggtgtee agetgagaga ttetetecag gaacteetea 900 ggaagccact cctgtggcgt cagcttcagg aaggtgatct gcggtgatgt gttggacagc 960 accattttgc ttctcacctc tgtgccatct tccagcacaa ctccttgaac acagccttca 1020 ctgttcacct gcaccttcgc cactgtcttt tcagtgaaga tgcttgctcc atgtgtggtg 1080 gctgagcttg cgatcgcatc agagagggca cccatgcccc cctggacgta gccccaggcc 1140 ccctgcattc cctccaggcc ccccatcaca tggtgcagca gcacatacct gtggacagac 1200 cateegaete agateetgga ggtgggatet cateteeeca gagtteeagg tgeaactatt 1260 cetttecate ttgatettea gecettecet gecaecatee agecetetee cageageett 1320 caatgagete aagttettgt aagageeett tgeettetet acaccetete eetaacaagt 1380 gtgtctatgt gcatagctta ttaccacaaa gaaggcaacg atgcccaaac ctgcagctcc 1440 agecetetee tgagetecag etceggtgte cagetaceca cagatatete cetttggace 1500 ctttettgge ageatettaa acceaceace tttteeceat tetecagetg etteceette 1560 aatotttooc atoccagtga acggcacctt tcaacaggag gttotgttto cgacagaaat 1620 ccaggtgtca gccttgaccg ctaccatcct tccccatcta catccacaaa gcaacaccaa 1680 ctcagcetce aaagggettt caaggteate ceacetetea geetetette tetteettat 1740 getgetgeag tagtgeecet cattggacee ecteteecae actttetete etgeaggtet 1800 tgtccacata tatcctggag ccctatctta aagcccagct ctgctcctgc cactcactta 1860 teaceattee aageeteece ggettggeac tgetettagg ataatggeea gtettetage 1920 aggcactcca gcctcatccc tcatc 1945

```
<210> 5823
<211> 1002
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (368)...(837)
<223> similar to gi332566 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5823
ttttcaacct taaaaaattt taatggaatt ttcttctttt ttttttttct ttaaataaca
                                                                       60
atttgacaaa agggtgaaaa aatcctaaac aaggtattga ggccagtgtc caggctgcat
                                                                      120
tcagttcaca aaactgtcct caggacgttg catggaactg gaaatgtgta taattacaga
                                                                      180
agaaaacagg gaggacttag tgcagagagg agacgagtgt ggacgggcaa cagcatcctt
                                                                      240
agtettteat atttatatat ggtatatgta ttttetatat atatatttat atattttaca
                                                                      300
tecaggtate ceagteatet gtaceattte ceagggagae atgggtgett ceaaggegag
                                                                      360
acaggaaagg gttaggcagg gaaggggcag cgacggtgca ggctggggct tggctcacag
                                                                      420
aagetgeagg agetteageg aetgtaagag ggeeeeggge teegeagaeg eeaggtaetg
                                                                      480
gcagcaaage cagteeteca getecaegee eegeetgega tecaeegeet teteegeaaa
                                                                      540
etteateate ateagggeee getteatgte gateeagttg tgeagegtge egeacagege
                                                                      600
ctecteegag gtgeeegget getgeaceag etegegeega ggeeeceaca geaggeactg
                                                                      660
cagcacgcgc ttggcctcgc cgatgcggat acgcttgatg gggtcggcct ccagtagcag
                                                                      720
atgtgccage tgctgcagge cgggtgagta gagggacage gcgggcageg gcggcaggte
                                                                      780
ctcctgccgg tagtctctct cccgcagctg ggcgcgcacc tcgaacgggt tgggttggtg
                                                                      840
cagcageteg tagatgagga tgcctgtctg gaactcateg aacttgcggt actgggaage
                                                                      900
agacacgata tegggggeea geegggeetg getettette tgetgeaggt ttggggtget
                                                                      960
gcccggcttc tgcttggcct tcaaaaagtt gctgatgatg ag
                                                                     1002
```

```
<210> 5824
<211> 3270
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (3271)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1499) ... (548)
<223> similar to gi5420387 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5824 ggaccgcgct caacggcctc ttctggttgc tgtcttcctc gtccctccgg cccattgttc 60 ctactcacgc gtctcacttt atggcctatt ttctgcatgg atctctggca gcctcgcttt 120 ctccctgacg tttcagcatc atccccagag gagccacact ctgacagtga gggtgcgggg 180 teaggegeee ggeegeacet getgagtgtg ceegagttgt geagatacet ggetgagage 240 tggctcacct tccagattca cctgcaggag ctgctgcagt acaagaggca gaatccagct 300 cagttctgcg ttcgagtctg ctctggctgt gctgtgttgg ctgtgttggg acactatgtt 360 ccagggatta tgatttccta cattgtcttg gtgagtatcc tgctgtggcc cctggtggtt 420 tatcatgage tgatecagag gatgtacaet egeetggage eeetgeteat geatetggae 480 tacagcatga aggcagaagc caatgccctg catcacaaac acgacaagag gaagcgtcag 540 600 gggaagaatg cacccccagg aggtgatgag ccactggcag agacagagag tgaaagcgag 660 gcagagctgg ctggcttctc cccagtggtg gatgtgaaga aaacagcatt ggccttggcc attacagact cagagetgte agatgaggag gettetatet tggagagtgg tggettetee 720 gtatcccggg ccacaactcc gcagctgact gatgtctccg aggatttgga ccagcagagc 780 ctgccaagtg aaccagagga gaccctaagc cgggacctat gggagggaga ggagggagag 840 etggeeette eegaagaeet aetaggeegt eeteaagete tgteaaggea ageeetggae 900 teggaggaag aggaagagga tgtggeaget aaggaaaeet tgttgegget eteateeeee 960 ctccactttg tgaacacgca cttcaatggg gcagggtccc cccaagatgg agtgaaatgc 1020 teceetggag gaceagtgga gacaetgage eeegagacag tgagtggtgg eeteaetget 1080 etgeceggea ceetgteace tecaetttge ettgttggaa gtgacecage ecceteceet 1140 tecattetee cacetyttee ceaggaetea eeccageeee tyeetyeeee tyaggaagaa 1200 gaggcactca ccactgagga ctttgagttg ctggatcagg gggagctgga gcagctgaat 1260 gcagagetgg gettggagee agagacaeeg ceaaaaeeee etgatgetee aeeeetgggg 1320 cccgacatcc attetetggt acagtcagac caagaagete aggccqtqqc aqaqccatqa 1380 gecageegtt gaggaaggag etgeaggeac agtagggett eetggetagg agtgttgetg 1440 tttcctcctt tgcctaccac tctggggtgg ggcagtgtgt ggggaagctg gctgtcggat 1500 ggtagctatt ccaccctctg cctgcctgcc tgcctgctgt cctgggcatg gtgcagtacc 1560 tgtgcctagg attggtttta aatttgtaaa taattttcca tttgggttag tggatgtgaa 1620 cagggetagg gaagteette ecacageetg egettgeete cetgeeteat etetattete 1680 attocactat geoccaagee etggtggtet ggeeetttet titteeteet ateeteaggg 1740 acctgtgctg ctctgccctc atgtcccact tggttgttta gttgaggcac tttataattt 1800 ttetettgte ttgtgtteet ttetgettta ttteeetget gtgteetgte ettageaget 1860 caaccccatc ctttgccagc tcctcctatc ccgtgggcac tggccaagct ttagggaggc 1920 tectggtetg ggaagtaaag agtaaacetg gggeagtggg teaggeeagt agttacaete 1980 ttaggteact gtagtetgtg taacetteac tgeateettg ceccatteag ceeggeettt. 2040 catgatgcag gagagcaggg atcccgcagt acatggcgcc agcactggag ttggtgagca 2100 tgtgctctct cttgagatta ggagettcct tactgctcct ctgggtgatc caagtgtagt 2160 gggaccccct actagggtca ggaagtggac actaacatct gtgcaggtgt tgacttgaaa 2220 aataaagtgt tgattggcta gaactgctgc ctccctgact gtgagctgcc ttccacaccc 2280 tgcactgcac tgtgttctct cctcaccctt aacctgcttc actccagtct gttctggctg 2340 tttattacct tgttgcaaaa cagggccgaa gcaaggatta ccttgacaac cctagcttct 2400 cettagecat etteettgae agtgtgatet gtttagtgag atttageatg tgtgaataaa 2460 gtatatgcag gaggaaattg ctttgtcttc ccaatcggta gaaattcggg accataaaaa 2520 ttgtgtttta ccatgtggcc tacaacctta acactgcttt cttaagaagt cttcacccat 2580 ctacatgcta acaactcact cagcetggat ttatetttac tggggaagec aaacaagcaa 2640 tagaggacct ttacctgtgt tagaaatgag ttggagccaa ggaacactga agaaatagta 2700 tcttaacagt tactgagtcc attgtatgtg cttggctctg ctctgagtga tttatatgta 2760 ttaagatttt teeteacagg teagatatat aetgttaeta attteatttt atagaeaggt 2820 taagetteet gaaggeeaca ggteecagta aattgtggag eeagaaceea aaceeaagaa 2880 gttttggctt cagcaaatgc atcagacagc ccctgtccat taatagggca caggtaggaa 2940 gatgcacaag gatgtgggaa ctatagagaa ccaatctgat gccttggctt aacaaagagt 3000 ggacatggca agcetteete tteggggaan aaaageeeag aactgageag atggeeteet 3060 ttatgagttc atgtcctccg ccttcagctg gaggtaccat atggcgatgc tacctgtctt 3120 tetgetggag gtaccatatg gtaatgetge etgtetgtet getggaggta ceatatggta 3180 atgctgcctg tetttctgag gttgactttt atgccatgtc tttcctaagt gtgtaagaat 3240 ttttctgttt gcttcacatt tgactgagaa 3270

```
<210> 5825
<211> 5010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (248)...(3530)
<223> similar to gi5870866 in the genepept database release 114,
    Run with FASTXY 3.3t00; default parameters
```

```
<400> 5825
gtagatttgg ttgctgtgta cgtggaagaa gcaagcgcat gcgcacatgg gcccccttcg
                                                                       60
teteagetgt gegggaaegg eegagggtaa cateeeggge tegegggagg etgteagggt
                                                                      120
aatggccaca cgctgacaga accagccgag tggaaaaggg gagcgaagcc gttcctctgc
                                                                      180
accettecce aggeetgagg cetteceget tggtgetgee geegeeactg eeggetgagg
                                                                      240
aggggcgatg agttggttca acgcctccca gctctccagc ttcgctaagc aggccctgtc
                                                                      300
ccaggcccag aagtctattg acagggttct ggacatccag gaagaggagc cgagcatctg
                                                                      360
ggccgagacc attccgtatg gagagccggg aataagttcc cctgtcagtg gaggatggga
                                                                      420
tacttcaacc tgggggttga aatcaaacac tgaacctcag agtccaccaa tagcctctcc
                                                                      480
taaagcaatc acaaagccag ttcggaggac tgtggtcgat gaatctgaaa atttcttcag
                                                                      540
tgcctttctc tcgccaactg atgtccagac cattcagaag agtccagtgg tatcaaaacc
                                                                      600
tccagcaaaa tcacaacgac cagaagaaga agtgaaaagc agcttacatg aatccttgca
                                                                      660
cattggccag tcaagaactc ctgaaacaac tgaatcacaa gtaaaagact cttctttgtg
                                                                      720
tgtttcaggg gaaactctgg cagcaggtac ttcatcacct aaaactgaag gcaagcacga
                                                                      780
agaaactgtt aataaagaat cggatatgaa ggtgccaact gtaagtttga aagtatctga
                                                                      840
aagtgtaatt gatgtgaaaa caactatgga aagtatatet aatacgteta egeagtetet
                                                                      900
cacagcagaa acaaaggaca tagctttgga acctaaggaa caaaaacatg aagacaggca
                                                                      960
gagcaataca cetteteete etgttagtae etttteatea ggtaetteta eeaceagtga
                                                                     1020
tattgaagtt ttagatcatg aaagtgtaat aagtgagagc tcagcgagct cgagacaaga
                                                                     1080
gactacagat tcaaaatcaa gtottcactt gatgcagaca tottttcago ttotototgo
                                                                     1140
atctgcttgt cctgaatata atcgtttaga tgatttccaa aaactcactg agagttgctg
                                                                     1200
ttcatctgat gcttttgaaa gaatagactc atttagtgta cagtcattag atagccggag,
                                                                     1260
tgtaagtgaa atcaattcag atgatgaatt gtcaggcaag ggatatgctt tagtgcctat
                                                                     1320
tatagttaat tetteaaete caaagtetaa aacagttgaa tetgetgaag gaaaatetga
                                                                     1380
agaagtaaat gaaacattag ttatacccac tgaggaagca gaaatggaag aaagtggacg
                                                                     1440
aagtgcaact cetgttaact gtgaacagee tgatatettg gtttetteta caccaataaa
                                                                     1500
tgaaggacag actgtgttag acaaggtggc tgagcagtgt gaacctgctg aaagtcagcc
                                                                     1560
agaagcactt tctgagaagg aagatgtttg caagacagtt gaatttctga atgaaaagct
                                                                     1620
ggaaaaaagg gaggctcagt tattatctct tagtaaggaa aaagcacttc tagaagaagc
                                                                     1680
ttttgataac ctgaaagatg aaatgttcag agtgaaagaa gaaagcagta gcatttcttc
                                                                     1740
cttgaaagat gagtttactc aaagaattgc agaagcagaa aagaaagttc aactagcctg
                                                                     1800
caaagagaga gatgctgcta aaaaggaaat caaaaacata aaagaagaac ttgccactag
                                                                     1860
attaaatagt agtgaaactg cagacctttt gaaagagaaa gatgagcaga tccgagggtt
                                                                     1920
aatggaagaa ggagaaaaac tttcaaaaca gcagctgcac aattctaaca tcatcaagaa
                                                                     1980
attaagaget aaagacaagg agaatgaaaa tatggttgea aagetgaaca aaaaagttaa
                                                                     2040
agagctagaa gaggagttgc agcatttgaa acaggtcctt gatggcaaag aagaggttga
                                                                     2100
gaaacaacat agagaaaata ttaaaaaact aaattccatg gtagaacgcc aagagaaaga
                                                                     2160
tettggeegt etteaggtag acatggatga acttgaagaa aagaacegaa gtatteagge
                                                                     2220 .
```

```
tqccctqqat aqtqcataca aagaacttac tqatcttcac aaagccaatg ctgcaaagga
                                                                   2280
2340
aqcattaqaq aaqqcccaag aagaagcccg tcagcagcaa gaaacattag ccattcaagt
                                                                   2400
qqqqqacctt aqqcttqcat tgcaqcgtac agaacaagcg gctgccagaa aggaggatta
                                                                   2460
tttacgccat gagateggtg aacttcagca gagactccag gaagcagaga atcgaaacca
                                                                   2520
ggaactgagt caaagtgttt catcaacaac aagaccattg cttcgacaaa tagaaaattt
                                                                   2580
gcaagcaacc ctgggatccc agacatcgtc gtgggagaaa ttagagaaga atctttctga
                                                                   2640
taggettggt gaateeeaga eettgetgge ageageagtt gagagagaae gtgeagetae
                                                                   2700
agaagaacto ottgotaaca aaattoagat gtottocatg gagtoacaga attototttt
                                                                   2760
                                                                   2820
aagacaggaa aacagtagat ttcaagccca gctagaatca gagaaaaata ggctgtgtaa
actggaggat gagaacaata ggtaccaggt tgaattggaa aacctaaaag atgaatatgt
                                                                   2880
                                                                   2940
aagaacactt gaagagacga ggaaagaaaa gacattgttg aatagtcagt tagaaatgga
aaqaatqaaa gttgaacaag aaaggaagaa agccattttt actcaagaaa caataaaaga
                                                                   3000
aaaggaacgc aagccatttt ctgtttctag cactcccacc atgtcacgct caagttcaat
                                                                   3060
aagtggtgtt gatatggcag gactacagac atcttttctg tctcaggatg agtctcatga
                                                                   3120
tcactcattt ggaccaatgc ctatatcagc aaatggaagc aatctttatg atgctgtaag
                                                                   3180
gatgggagca ggatcaagca taattgaaaa cctacagtct cagctaaagc taagggaagg
                                                                   3240
ggaaatcact catttacagc tagaaattgg caatctagaa aaaactcgat caataatggc
                                                                   3300
tgaagaacta gttaaattaa caaatcaaaa tgatgaactt gaagagaagg tgaaggagat
                                                                   3360
acceaaactt agaacteage taagagattt ggateaaagg taeaacacta ttetgeagat
                                                                   3420
gtatggagaa aaagcagaag aggcagaaga acttcgatta gatctcgaag atgtaaaaaa
                                                                   3480
                                                                   3540
tatgtacaaa actcaaatag atgaactttt aagacaaagt ctcagttaac ttgtgaaaat
tgaatteeca teaaactgaa tgtaagcatt taatatetaa acatttaatg eggaetteea
                                                                   3600
ataaattott ttatataatt atatagtggg atttactgta gagtgtaaaa atttttttaa
                                                                   3660
aattgattta cactatgtag taatatttac agttaaatta ttttgtgcaa tatttgaact
                                                                   3720
ttatttttga aactattett taaagattta ttttttaaag catteatttt tttteettga.
                                                                   3780
atagcacaga gatttattac tttatcctca tataaatatg gctagagaag aagaatggtg
                                                                   3840
                                                                   3900
ttcátatátg táttgtagát atacaactag ttgtatótat aatttgtáag tgtttatata
tatattaaga acatttgaag agtaatgtta acatactgaa actttgaaat ctttcacatt
                                                                   3960
taaaatttca acatatctta attactgctc atgaaaatgt acattaagtg ttaaagtaaa
                                                                   4020
aaattattaa atotgtggot attaaatttt aaactaattt ttttoottta aaagtaagag
                                                                   4080
tçacactgac actgtctgaa atttaaagag tgaatgattt aaacttaaaa aaaattttga
                                                                   4140
tetgaaaatt tattteacce agettteaca attaagtetg tataaaatgt ggtacetttt
                                                                   4200
ggtacctatc cagagaaacc tgtacatatt caatgttatc tagatgtgat tggataatgg
                                                                   4260
agaaaattta tttataatga ttttgcaatg gcatcaataa catttaaatg attttgaaga
                                                                   4320
agtattattt tactacccta taaaatgaat cgaaaataat aaagttctta acataattta
                                                                   4380
ctctttaaaa attacctgtt catattttgt aaacccatat ttttagcaca ttaaaaatga
                                                                   4440
atgtttgata ttacagaata ttcataacaa aatggaagaa ttataggaat taacttgaat
                                                                   4500
ttggcatttt taattttgtg atttatcatt ttatttttt ttgaaatttc aaacacaagg
                                                                   4560
aaagcataga atagetttta aaagtageta tgeettette caaatgitat titatteaaa
                                                                   4620
aaggtaacca ggttgtgttt taaacctgtg aaatattgtg atgcatttta ttactgaaag
                                                                   4680
ttatttaact gcctttactt gcacataaaa actetcattt acggccaggt gctgtggctc
                                                                   4740
atgootgtaa toocagogot ttgggaggoo aaggogggoa tatoacotga tqtcaqqaqt
                                                                   4800
tcaagaccag catggccagc agtttggtga aaccccatct ctactaaaaa tacaaaaatt
                                                                   4860
agcctggcgt ggtggtgtgc gcctgtaatc ctagctactc gggaggctga ggcaggagca
                                                                   4920
ttgettgaac etgggaggtg gaggttacaa tggageecaa gattgtgeée aetgeactee
                                                                   4980
agcatgggtg acagagaaag actccgtctc
                                                                   5010
```

<210> 5826

<211> 2481

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (129)...(2166)
<223> similar to gi36439 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 5826

```
eggtegacga tttegtecag gaggeacget ggtttteegg ggeegeteca tegegeette
                                                                     60
ctcctgcgcc tcgcttctcc ggtccagccg ccatcttcct ttccgcacag gggccgccga
                                                                    120
geggggeeat geageeaacg etgettetea geeteetggg ageegtgggg etggeggetg
                                                                    180
tcaattccat gccagtggat aacaggaacc acaatgaagg aatggtgact cgctgcatca
                                                                    240
ttgaggtcct ctcaaatgcc ttgtcgaagt ccagcgctcc acccatcacc cctgagtgcc
                                                                    300
gccaagtcct gaagacgagt agaaaagacg tcaaagacaa agagacaact gaaaatgaaa
                                                                    360
acacaaagtt tgaagtaaga ttgttaagag acccagctga tgcctcggaa gcccacgagt
                                                                    420
cctccagcag gggagaggca ggagccccag gggaggagga catccaaggc ccaacaaagg
                                                                    480
cagacacaga gaaatgggca gagggaggcg ggcacagccg agagcgagcg gatgagcccc
                                                                    540
agtggagcet etatecetee gacagecaag tetetgaaga agtgaagaca egecattetg
                                                                    600
agaagagcca gagagaggat gaggaggagg aggagggaga gaactatcaa aaaggggagc
                                                                    660
gaggggaaga tagcagtgaa gagaaacacc ttgaagagcc aggagagaca caaaacgctt
                                                                    720
ttctcaatga aagaaagcag gcttcagcta taaaaaaaaga ggagttagtg gccagatcgg
                                                                    780
aaacacatgc tgccgggcat tctcaggaga àgacacatag ccgagagaag agtagccagg
                                                                    840
agagtggaga ggaggcaggg agccaggaga atcaccccca ggagtctaaa ggccaacccc
                                                                    900
gaagccagga agaatctgag gaaggtgagg aagatgccac ctctgaggtg gacaaacgac
                                                                    960
gcacgaggcc cagacaccac cacgggagga gcaggcccga caggtcctct caaggaggga
                                                                    1020
gtcttccctc tgaggaaaag ggacaccccc aggaggaatc tgaggagtca aacgtcagca
                                                                    1080
tggccagttt aggggaaaag agggaccacc attcaaccca ctacagggct tcagaggaag
                                                                    1140
aacctgaata tggagaagaa ataaagggtt atccaggcgt ccaggcccct gaggacctgg
                                                                    1200
agtgggagcg ctataggggc agaggaagtg aagaatacag ggctccaaga cctcagagtg
                                                                   1260
aggagagttg ggatgaggag gacaagagaa actaccccag cttagagctt gataagatgg
                                                                   1320
cacatggata tggtgaagaa agtgaggaag agaggggcct tgaqccqqqa aaqqqacqcc
                                                                   1380
1440
aaaggttett gggtgáagga caccacegtg tecaágaaaa ccagatggac aaggcaagga
                                                                   1500
ggcatccaca aggtgcgtgg aaagagctgg acagaaatta tctcaactac ggtgaggaag
                                                                   1560
gagccccagg gaagtggcag cagcagggag acctgcagga cactaaagaa aacagggagg
                                                                   1620
aagetäggtt teaagataaa eäatataget eeeateaeae agetgaaaag aggaagagat.
                                                                   1680
taggggaact gttcaaccca tactacgacc ctctccagtg gaagagcagc cattttgaaa
                                                                   1740
gaagagacaa catgaatgac aattttctcg agggtgagga ggaaaatgag ctgaccttga
                                                                   1800
acgagaagaa tttcttccca gaatacaact atgactggtg ggagaaaaag cccttctctg
                                                                   1860
aggatgtgaa ctgggggtat gagaagagaa acctcgccag gggtcccaag gctggactga
                                                                   1920
aaaaggcaat atgacagggt gcccccactt gaaccagctc cttcactaca gaaagaagtc
                                                                   1980
agettgagtt tecagaette tatgattetg aggageeggt gageaceeae caggaggeag
                                                                   2040
aaaatgaaaa ggacagggct gaccagacag teetgacaga ggacgagaaa aaagaacteg
                                                                   2100
aaaacttggc tgcaatggat ttggaactac agaaqataqc tqaqaaattc aqccaaaqqq
                                                                   2160
gctgactgtc attggagcgg tgggcactgt taagaagcag ccatcacatg atctgttttt
                                                                   2220
caccacttca ctgaaagaca ccatttatct acccaagggc agaaagtaga acttactatt
                                                                   2280
cattaaatgt ttgacacaat tggaattgtc tttaatttct gtcagaatgc tattgaaaat
                                                                   2340
gtgaattgca tgacttgtag catattcttt tctgcaaaat agacatatta acatgcttat
                                                                   2400
gacaaatgac ttgtgctact tgtcttttgg gaaaatgttt gtctcagttg gaaataataa
                                                                   2460
aagattcacc tgagaccaaa a
                                                                   2481
```

```
<210> 5827
<211> 2793
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2794)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2515)...(2217)
<223> similar to gi3850063 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5827 tttttttttt ttgtcatact aaatatttat tttctgcaga ctgacttcgg agtaattctt 60 gagccaggag gggagaggtt agtgttcaaa ttgctgagat cttaggtcaa aaagctacag 120 aaaagaaatc actttgaaaa acacaatgac tcagaggcag tcaccccttg ccagcaattc 180 caagagetga ggaggettea tgeeteagga catggtgaet agttgagtga accagagatt 240 gaggcagtgg tttttacagg ggaagaaaca agccttgggt gtatgggagc aggaaaggag 300 ggtgacagac tggagaaatg ataaaggcca ttttggaagc ccacagggaa gtggtcttgg 360 gaaacctgaa gacactggga tattcagaag gccaagggga tccagcttat cctgttgggc 420 aaggtgctgg gagtgaaggc aggtaagcca tgtcaagggc ctgggaagca aggggaaaac 480 tggaaggggt accccaggtg aagaagggta tggaatgggg tgcagaagtc catggagatg 540 acceggcagat ctcagggcgg tttctggcac atcagaagtt gggcttatgc ttcttgagct 600 ccaccataag gtggtgaatg ttgatgaget cageceggge agggaggget eggagetgeg 660 gctgggacag gcacccggtg gaagcgatga tagaggctgg atcagctggg tcagcgctcc 720 ctgaatgata ctggtgccat ttctgaagtt ggtgaaactc cgcattacat cctgactcag 780 agattccact gatgatttcc aggaactacc aaagccacgg atcagctgag ttacccgggc 840 ttetteeeet egaagteget eageetgtee aegeteaate aaageeteag eeteetteae 900 aaatgccact aaacccccaa aagggggaga cagcaactct tcaatgaatt cctgtgtccg 960 agcattgage agetgetgga ageteteaac etetttgetg teatetgeag eeegeteeta 1020 ttaccatcag cacacccage atcatgtcat agttgttgat cagaaacaca agctgctcct 1080 tecttgagga gaactcaget gecactegga ggacaaaatt etecacetee acetgeaget 1140 gtcccagcaa ttgcatggtc cgttcattag gaattgtctg gttgatactg acaagagcgg 1200 aggagaacte tgcatagegg egtgtgatat agtggggeeg agtatecaac ecceetagge 1260 gctgggggtc agtgcttcgg acgctctgaa cattcatctc caggatcagt tcaaaccgtg 1320 gccatagcaa ggcaagcacc tgttcccagt acctgtccag ggcaggaaca tccctctttg 1380 ctgcaatgtt acggaaccgg agaacaatgt ggatacagag aaaaacagca atggcatcgt 1440 agcagtcage tagataagaa tecaggtgtt teagggteat getgagtgta eggeecatga 1500 cagcatggaa caggtcgtgt gcagctgggc cagacacaac aaaaaattca cagatgaaaa 1560 ggtattcgcg gcaggaattg tctaggaggg cgtagtgctg gctgcggaag agggcctcaa 1620 atggatacct ctgctctccg cgctgcgctg tgtgaggcac caggatgggg gcctcaagtt 1680 cagtggggga gatgacagag ccgcgggttc ctagggtgaa aatggtgttc ctgctgcgga 1740 gcgatggctt tgagaagaat cctttctttg ctgtatcttc cacacccatt agatcatctt 1800 teteagegae tteeteatae tgeacettea tgageegeee caggtaagag eggtagtaag 1860 acaggtaaat cttgctcagc gtctccacat attcatccct gatctccttt gctgttgctc 1920 gttcattgcc cagcagaaac tgatagaaga acctgtactt cagcagggcc gtctqqqqqa 1980 ' tctgatagtt ggtcatgggt ttcctgaagg aataaatctt ctggaggata aactctcgga 2040 tettegteae tgeettgaee eggageegat egageaegee tetgaeatet gegeaggetg 2100 ctgtgcctct agcttcctgc tctctgactg cggctgcctt ggcatccagc tcctgtagct 2160 getecaagaa eetgggetet gteaetggag eetecagaat tgeegtgaee agageagaag 2220

```
gcaccaccag accatcaaca agetececaa gtttececeg aactgeetgg egatttegaa
                                                                     2280
gtcgaatgtt catggctcct gactgttcct gcagtgtccg gatctcagag ctgatggagc
                                                                     2340
                                                                     2400
tgaggtcact ctgaaaagct cccaacatct gctccattcg ctccaggaca gcatcacagg
ctgtgatctg gttgtgtaga gatgctatat tctcactctc ttgaatataa tcccgaatgg
                                                                     2460
atttctgttc aatctgctgt agctccagct caacttgctt tgaatagtga cggagatcta
                                                                     2520
cacccatcca cttcatccag gatgaattca tcagaagtga tatccaactc cccaagttgc
                                                                     2580
agtggttcct ggagcccagg accacccgct tccggcaact gtcagtcccg gcgagtccgt
                                                                     2640
tecceggagt ggagetacaa gteceaaagg gtetteetea gegegaaate gtteccagat
                                                                     2700
atttgagata agttgtttga ctccagctgt cccctttcag ctctaaccac tacgaaatcg
                                                                     2760
                                                                     2793
tcgacccgga aattnnnngc ggtcacagat ggg
```

```
<210> 5828
<211> 1711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (359)...(1357)
<223> similar to gi642486 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5828 ggaattcccg ggtcgacgat ttcgtgcggt catggaggcg ggcgccggag ccggcgggg 60 ageogeggge tggagetgee egggeeeagg acceaeagtg accaetetag geteetatga 120 ggetteegag ggetgtgaga ggaagaaggg ccaacgetgg gggteeetgg aacgaegggg 180 gatgcaagct atggagggg aggtgttact cccagctctc tatgaggagg aagaggaaga 240 ggaagaggag gaagaagagg tggaagaaga agaagaacaa gtgcagaaag gtggcagtgt 300 tggctctctg tcagtcaaca agcaccgggg actgagcctc acggagacag agctggagga 360 getgeggget eaggtgetge agetggtgge agaactggag gagacceggg aactggcagg 420 gcagcatgag gatgactect tggagctaca ggggctcctg gaggatgaac ggctagccag 480 egeceageag geagaggtgt teaceaagea gateeageag etecaaggtg agetgegtte 540 tctacgggag gagatttccc tgttagagca tgagaaagaa agcgaactta aggaaataga 600 acaggaattg catttggccc aggctgagat ccagagtctg cggcaagcag cagaggattc 660 cgcaactgaa catgagagtg acatagcatc cctgcaggag gatctctgcc ggatgcagaa 720 tgaacttgaa gacatggaac gcattcgggg agattatgag atggagatcg cctccctccg 780 tgcagaaatg gaaatgaaga gctctgaacc atccggtagt ttaggtctct cagattactc 840 tgggttacaa gaagaactgc aggagctgcg ggaacgctac catttcctga atgaggaata 900 ccgggccctg caggagagca acagcagcct cacggggcag cttgcagatc tggagagtga 960 gaggacacag agagcaacag agagatggct gcagtcccaa acactgagta tgacgtcagc 1020 agagteteag aetteagaaa tggatttett agageetgat eetgaaatge agttgttaeg 1080 1140 gtgttgtgag ttggaagagc tacagcatca tcgccaggtc agtgaggagg agcagaggcg 1200 gctgcagagg gagctcaagt gtgctcagaa tgaggtgctt cggtttcaga cctcccacag 1260 tgtcacccag tcatccccta cccccaatcc ccccatcttc tccttgcctc ttgtaggccc 1320 tggtggtcat ctcggctttg ctctggtgct ggtgggctga gacgtcgtcc taatgcagaa 1380 catgititggg tigiggaagc ctatggtatt citggctatt gcagcigtgg cictgtatgt 1440 gttacccaac atgcgacagc aggagtcaga gttctgcctc atggagtgat ggcagacctt 1500 ggccagegeg agggcagate eccagtggee accaecetea getttgggea ggacaeaetg 1560 tgccagaacc ctccccatat gttccatgtg tccccatctc ctcagccctc agtcacccag 1620

```
<210> 5829
<211> 925
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (79)...(777)
<223> similar to gi3128208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5829
tttegtgggt actggggegt gegtgaggeg tttactgatg ettectggte eggtggeete
                                                                   60
ggtcccggta agccaggcat gaagatcaca aggcagaaac atgccaagaa gcatcttggc
                                                                  120
ttetteegea acaaettegg agteegegag eegtaceaga teetgetgga eggeaeette
                                                                  180
tgtcaggcgg cgctgcgggg ccgcatccag ctgcgggagc agctgccccg ctacctcatg
                                                                  240
ggggagacgc agctgtgcac cacaagatgt gtgttaaaag agctagaaac attgggaaag
                                                                  300
gacttatatg gggcaaaact gattgcacaa aaatgccaag ttcgaaattg tcctcatttc
                                                                  360
aagaatgcag tgagtggatc agaatgtctg ctttccatgg ttgaagaggg aaatcctcat
                                                                  420
cattattitg tggcaacaca ggatcagaat ttgtctgtga aagtaaaaaa gaaqcctgga
                                                                  480
gttcctctca tgtttattat tcagaacact atggttttgg acaaaccttc tcccaaaaca
                                                                  540
attgeetttg taaaageagt ggagteaggt eagettgtet eagtgeatga gaaagaaagt
                                                                 600
atcaaacatc tcaaagagga acagggttta gtgaaaaaca ctgaacagag gtagaagaaa
                                                                  660
aaagcgcaag aaaataagtg gtcccaatcc tcttagttgt ttgaagaaaa agaaaaaggc
                                                                  720
780
atctaaccca aaagtacttt ctgagaagca gaatgcagaa ggagaatgaa tcctttqqat
                                                                  840
actttcaagg acattcaaat gtgaaaatga attttttaca actagaagta tttataataa
                                                                  900
aagaccaaac ttatttttgt aaatg
                                                                  925
```

```
<210> 5830
<211> 2129
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1983)...(1659)
<223> similar to gi2887314 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5830
ttttttttt ttagaaaaac atttattgta atcgatcaca ttcaagtcgt agttctgaaa
                                                                       60
gcaaagtgaa aacacacagt acagctatgc ctcagtatcc atgggggatg ggttccagga
                                                                      120
                                                                      180
ctgcaacctc aaccctcaga caccgacatc tgaggatgct caagtccctg atgggcaatg
gcatagcqtt tgcacqtaac ctacgcacac cttcctgtat aatttaaatc atctctagat
                                                                      240
ttcttataat accaaataca atataaatgc tatgtaaata tgctacacca tattgtttag
                                                                      300
ggaataatgg caagaaaaaa aggtctgtac gtgttcagta ccaatgcaat ttctttttc
                                                                      360
aaatatttcc tatccaaggc tggttggatt taaatgtgga gaccacagtt acggagagct
                                                                      420
                                                                      480
gactgtactg gggaaatctt tagggtagaa acatttttta gagatggttt atatcacccc
ccttcagaaa gagcaataca ggcatacctc attttactat gctttgtgaa tactgttttt
                                                                      540
ttttttttäaa ttgäaggttt gtagcageet ggeateagge aagtetattt ggeaceattt
                                                                      600
tccaacagca tgtgctcact ttgcgtttct gtgtcagcat tttgaacagt aaatattttt
                                                                      660
aaattaaggt ttgtatattt gttagacata atgctattgc acatttagtg gactgcaata
                                                                      720
                                                                      780
tgcagtaaac atgacttaga tgcactggga aactaaaaca atgcgcttcc ttgctttatt
                                                                      840
gtgatgttgg ctttaccgag gtggtctgga actgaaccca caatatctcc gagatatacc
tgtacttttt actaaaaata tttcatttga gaagtaaacc tcaagaacta ccaggacttt
                                                                      900
                                                                      960
tcagatggga agagcgagge cetggeaggg egagtetagg tgtgeageet agtgggggee
ggggtcaagt ccactcggta tttgtggctt cactcagcag gccgcccgtc ccctccgtgg
                                                                     1020
ggccattcga cagtccctgg gtaggggacg gttgcactag gaggtaaaca tgattccagc
                                                                     1080
atgggetget ceaaggeeet gagaeeeeag gaeetgeagg ggggtgggat ceagteetge
                                                                     1140
agcaggtgct ctgaagagga gtcatctccc aagatgagaa ggccccgggg ggaggatgaa
                                                                     1200
gtgtggtcag accgtcggct gagcgtgatc acttccccag acccatgcgg gtgagaggac
                                                                     1260
tcagcagacg cotcogaago otgoggcagg caggoottta otottcactg gggggocagt
                                                                     1320
cagagggctg tcatggcagg ccagtgcaca tgccaccaac acatgctgct tcatcagtaa
                                                                     1380
tttctggaac atgacactgc acagcggtgg cctctccagc gggacattac tagtaataca
                                                                     1440
ctgatgatgt ggagattecc cagggggcat ccgctgggct tctcccaact cccaagccac
                                                                     1500
ctcttcagaa tcacagagtc atttaaaggg gccccccacc tccccggagg tgcggcctag
                                                                     1560
teateatact ggatetegge eegeagetee ttggtgaegt agtteaceag catggeeage
                                                                     1620
agetgetget geagggeete getgeecatg accagegeag teagetgeae ggegteegte
                                                                     1680
caetccaggt geetgatgat ggetgegget tegttaaaga geetetgttg eteggeaggg
                                                                     1740
ggcagctcca ttaggatctg aggaaccggc ttaaactgtc cacttgtcat ccaggcacct
                                                                     1800
aacagcccc cgacagccc cccaacggcg agtcccggtg ggccgcccac caaacccccg
                                                                     1860
acgaaggeca tggcccctgt gaccagggca cccttcccag agtgcttgac agccgccttc
                                                                     1920
atctteetet eeccagaaag ggageacage agetteatga tgteeteeae catgatagte
                                                                     1980
ategtggegg gettgtgtga etteageete teeatgeete agttteteea tagggacaat
                                                                     2040
gactacacta acagtgtcca ccccggcacc ggcagggcgg gctcccggca gggcggggac
                                                                     2100
cctctccca aggcactccc gggacgaaa
                                                                     2129
```

```
<210> 5831
<211> 901
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (22)...(592)
<223> similar to gil055186 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5831

```
60
ggatqtcctg ctagcgctgc gatggcggag gccgagttgc gtattgacga gctggtccgg
                                                                      120
gagtacetge tetteegegg gtteaegeac acaetgegge agetggaege egagateaag
                                                                      180
gcggacaagg agaaggggtt ccgggtggat aagattgtgg accagctgca gcagttaatg
                                                                      240
caggigtatg actiggetge cettegggat tattggaget actiggageg teggetette
                                                                      300
agccgcttgg aggatatata cagacccaca atccacaagc tgaaaaccag cctgtttcga
                                                                      360
ttttatcttg tctacacaat ccagacaaac agaaatgaca aggctcagga gttctttgca
aagcaggcca cggaactcca aaaccaggct gagtggaagg attggtttgt cctgcccttc
                                                                      420
ctgccatccc cggacaccaa ccccaccttt gctacctact tttctcgaca gtgggctgac
                                                                      480
accttcattg tgtccctgca caacttcctg agcgtcctgt ttcagtgcat gccagtccct
                                                                      540
                                                                      600
gtgatcctga actttgatgc ggagtgtcag aggactaacc aggttcaaga agaaaatgaa
                                                                      660
gttctgcgtc agaagctttt tgcattgcaa gctgaaatcc accgactgaa gaaagaggag
caacagccag aagaggaaga ggccttggtc caacacaaat tgcctcctta tgtctccaac
                                                                      720
atggaccgcc tgggggactc ggaacttgcc atggtgtgca gccaaaggaa tgcctccctc
                                                                      780
                                                                      840
teccagteae ttegtgtggg ettectgtee tegetgetge etcagagtaa gaagageeee
                                                                      900
tcaaggttgt cgcttgctaa ggcccttctt cacctcagag ctcgggccag aaagaagcct
                                                                      901
```

```
<210> 5832
<211> 2463
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (262)...(59)
<223> similar to gi2465334 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5832 cttccgagge gatcaggcag catcagtect cageegétaa gecaagaagt agtcagtcag 60 120 agageettgg geeagagtte eaggggetet gggagtgget accaggtgag ttgaacagte 180 cgatttccag tggagtctgg atttgaaatt ggtgagatgt ttcttgggtt ggtcggtatg agtacatgag gtcgtaggtg gatctttctc acggaccaaa gagcaggagg acaggggatt 240 gateteegaa gggaggteee eeaatttgag teteggeace aaattteatg caegteeatg 300 tgaagagacc accaaacagg ctttgtgtga gcaacatggc tgtttatttc acctgggtgc 360 420 aggeaggetg agtetgaaaa gagagteage gaagggagat aagggtaggg eegttttata ggatttgggt aggtaaagga aaattacagt caaagggggt tacccgäagc tcggcgtccg 480 540 tgatggteta gggggettee gaggegateg ggeagtgtea gtetteagte getaageega gaagatetgg gaaggaattg caactttttt ttttattatt gtacacettg aaggtgaggt 600 taattaagtc ctgttgtggg gtttgaggga aacaggccct tgaaaagaag gtaatgtgga 660 gegggtagee teegtattga ttaagaaggg gaegggetta cetteeactg tgagagttac 720 780 cggaageteg gegteegtga tggtetaegg ggetteegag gegateggge ageateagte ttcagccgct aagccgagaa ggagtcagtc agagagcctt gggccagagt tccagggact 840 ctggagtggc tgccaggtga gttgaacagt ccaatttcca gtggggtccc gcacagatgg 900 gacacggett aggaggaate etgggetgea tgeatteett ggeetggtag teagatttet 960 ggcacttgta gcaagctcct gggggagaag gttctggagt aacgcctggc cgctgcggtt 1020 caggeattig gaagttetig tgtgetggag atgtggetgg ggtttgtete acagtggagg 1080 ttacctaacc aaactcctgc aaaaccacac cacctatgcc tgtgatgggg actatttgaa 1140 tctacagtgc cctcggcatt ctacgataag tgtccaatcg gcattttatg ggcaagatta 1200 ccaaatgtgt agttcccaga agcctgcctc ccagagggaa gacagcttaa cctgtgtggc 1260

```
agccaccacc ttccaqaaqq tgctggacga atgccagaac cagcgggcct gccacctcct
                                                                     1320
                                                                     1380
qqtcaataqc cqtqtttttq gacctgacct ttgtccagga agcagtaaat acctcctggt
ctcctttaaa tgccaáccta cttcagatga attaaaaaac aaaaccgtgt gtgaagacca
                                                                     1440
qqaqctqaaa ctqcactqcc atgaatccaa gttcctcaac atctactctg cgacctacgg
                                                                     1500
                                                                     1560
caqqaqqacc caqqaaaqqq acatctgctc ctccaaggca gagcggctcc cccctttcga
ttgcttgtct tactcagctt tgcaagtcct atcccgaagg tgctatggga agcagagatg
                                                                     1620
caaaatcatc gtcaacaatc accattttgg aagcccctgt ttgccaggcg tgaaaaaata
                                                                     1680
cctcactgtg acctacgcat gtgttcccaa gaacatactc acagcgattg atccagccat
                                                                     1740
tgctaatcta aaaccttctt tgaagcaaaa agatggtgaa tatggtataa acttcgaccc
                                                                     1800
aageggateg aaggttetga ggaaagatgg aattettgtt ageaactete tggeageett
                                                                     1860
tgcttacatt agagcccacc cagagagagc tgccctgctg ttcgtgtcca gtgtctgcat
                                                                     1920
cggcctggcc catcacactg tgcgccctgg tcatcagaga gtcctgtgcc aaggacttcc
                                                                     1980
gegaettgea geetggggag ggageageet ggtgeeagga agtgaeaagg tegaggagga
                                                                     2040
caqcgaggat gaagaagagg aggaggaccc cctctgagtc tgatttccca ggggaactgt
                                                                     2100
cggggttctg taggacttca tatcctatat acagttccat agaagctgca gagctcgcag
                                                                     2160
                                                                     2220
aaaggattga gcgcagggag caaatcattc aggaaatatg gatgaacagt ggtttggaca
cctcgctccc aagaaacatg ggccagttct actgaaaacc acatgcatct tgatgcgatc
                                                                     2280
geactttetg aagaaggaag gateecaaat geeceteeag ttetggttea cetgtaeett
ctatgaagga gaattegtea tgteatteaa caetegtgag geeaggaage tattaaaggg
                                                                     2400
atgtttcaag ctgtttctag cacattccaa aataaatgag gagggaagag tcaaaaaaaa
                                                                     2460
                                                                     2463
```

```
<210> 5833
<211> 1403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(1269)
<223> similar to gi4321845 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5833
gtttcgtctc gaacttggtc ggggcgcgga tcccgagagg gaaagtcata acaaccgcac
                                                                   60
gagggagttc gactggcgaa ctggaaggcc acgcctcctc ccgcctgccc cctcagccct
                                                                  120
gtggctgggg gcagagctca gactgtcttc tgaagattga tgtctatttc cttgagctct
                                                                  180
ttaattttgt tgccaatttg gataaacatg gcacaaatcc agcagggagg tccagatgaa
                                                                  240
aaagaaaaga ctaccgcact gaaagattta ttatctagga tagatttgga tgaactaatg
                                                                  300
aaaaaagatg aaccgcctct tgattttcct gataccctgg aaggatttga atatgctttt
                                                                  360
aatgaaaagg gacagttaag acacataaaa actggggaac catttgtttt taactaccgg
                                                                  420
gaagatttac acagatggaa ccagaaaaga tacgaggctc taggagagat catcacgaag
                                                                  480
tatgtatatg ageteetgga aaaggattgt aatttgaaaa aagtatetat tecaqtagat
                                                                  540
gccactgaga gtgaaccaaa gagttttatc tttatgagtg aggatgcttt gacaaatcca
                                                                  600
660
agacttatta taaatgaaga totggacagt ggcacacaga taccgtttat taaaagagct
                                                                  720
gtggctgagg gatatggagt aatagtacta aatcccaatg aaaactatat tgaagtagaa
                                                                  780
aagccgaaga tacacgtaca gtcatcatct gatagttcag atgaaccagc agaaaaacgg
                                                                  840
gaaagaaaag ataaagtttc taaagaaaca aagaagcgac gtgatttcta tgagaagtat
                                                                  900
cgtaaccccc aaagagaaaa agaaatgatg caattgtata tcagagaaaa tggttctcct
                                                                  960
```

```
gaagaacatg caatctatgt ttgggatcat ttcatagctc aggctgctgc tgagaatgtg
                                                                     1020
tttttcgttg ctcacagcta tggaggactt gcttttgttg aactgatgat tcaacgagaa
                                                                     1080
geogatgtaa aaaataaggt aactgetgtg geattgacag actetgttea caatgtgtgg
                                                                     1140
catcaagaag ctggcaaaac gattcgagaa tggatgagag agaactgttg taattgggtc
                                                                     1200
totageteag aaccattaga cacateagtg gagtecatge tacetgattg ecceegggte
                                                                     1260
teageaggea ecgacegtea egagetaaet teetggaaga gettteegte tatttteaaa
                                                                     1320
ttetttaceg aageeteaga ggeeaagaee ageteeetga ageeggetgt gaegegeege
                                                                     1380
teccacegea teaageaega atg
                                                                     1403
```

```
<210> 5834
<211> 1791
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1534)...(479)
<223> similar to gi5139689 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5834 tttttttttt ttgcaatact gtaacgacag cttattcttt aataaaagtc aggggtgtca 60 gcagcgtcac tggtaagaca tgatggcgct ccacgactga ccagcagcgc tgggaaggga 120 cacgcagaac ccaccttcca accacgccca acacatcaca gaaatgcctg ctcgtttgtt 180 ttgattcata tacaaagtta caaagtattt cctgccccaa attcttaacg aaaatgaaag 240 aaaaacccta aaatgeggtg gttttacaag tatattagee cagaacatee tagggeaget 300 gegegggeeg egggtgegge agggegeagg egeaggeace geagageece ggeeagegeg 360 aaacggacgc aggcgcattc cccagccctc cgtggcgttc tcagcagcag atcgcccagg 420 cctggcccgg tcgggcttgg tgttgcctcc gaagtcgaga cgacggtgct gctcagttat 480 ettecgeett teegeactat ggtgggeagg egacaetget geggggeagg ettaaggtee 540 cttccgcgga tctgtcttct tgctcgcagg gatgcacttt cagggtctca gcaaccgcac 600 tettecattt gttecagate caageaegga etggeagegt ggggettgag taggaegaea 660 gtotgaccad tococgaaag otttagtttg ggcgagttoc atgacatagg coggtoctcg 720 tetettggga eggteeteet ettgetttag ggaetgttte tetgttettg gaagtagggg 780 tgctgcaggg cctggtgggc ggcgattctc tcatcgggaa tcatagccca ccattqcqtq 840 caggaggag aggcattgtg gggacaaatt ggttgttagt agaggtattc ctgatccctt 900 tttaaaagga aaatcaaaat tcatagctct cgactgtttg aacttggtga ggatcttctg 960 agogggtgtg cogatgacat ogtggatttt tgagatttgg tocagttcat ttactccagg 1020 aaagaggggc tgcagactgg cgatctcgta gaacacacag ccggcgctcc acaggtccat 1080 cttgtacgtg tagaacccat cagtgaggag acactccggg gcccggtacc agcgggtgga 1140 gatgtattcc gtgtacggct gcttggaata gacactccgg caggagccaa agtcccctaa 1200 tttcaggaca tcctttatta gtatattttc tggttttaca tctctgtgaa atattccatt 1260 tetgtgaata tgateeaggg aettacataa etggtacata tagtgeataa tttttttte 1320 tgataatggg tatcttctcc ctcgtattag ctcataaata ttcatgtcca taagttcaca 1380 tattagtgca agagaaccag attttctgtc actttcaaag cgctgcttca tttgtttaca 1440 tgcatagtag tttccatctc tcaggctttg catcttcata acttcagaaa acgttccctc 1500 tectattttg ccaattgett tatagttett catettggat geggaageeg gtgacaacee 1560 cttgccgaca ctggacggaa aagaaagaag caggaaggtt gtcccctgc tttccacttc 1620 cctgaggcgg ggtcccgcac taggatctcc gtggtggtcc ctcgaaggag agcgttagag 1680 atcccgccgc catgttgtgt ccctgtcacc ctagcaaccg tcaggccctg aacgccacgc 1740

```
<210> 5835
<211> 3143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3144)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (704)...(3143)
<223> similar to gi5852425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5835
tttttttttt ttgacgtagt ttegetettg ttgeecagge tgeagtacag tggtgeggte
                                                                       60
teggeteact geaacetetg cetecagggt teaagecatt ettetgeete ageeteeega
                                                                      120
gtagetgaaa tttacenggt actaceeace atgeeegget aattattttg tattttatt
                                                                      180
agagatgggg tttcaatcat tttggccagg ctggtcttga actcctgacc tcaggtgatc
                                                                      240
ctcggcctcc caaagtgcag ggattacaag tatgagccac tatgcctggc caaccaacaa
                                                                      300
tctttttaaa agaatcggtt ttttttttt tctgagcagt aggtctcaat agtgggatta
                                                                      360
aaatatteag taaaceatge tattaacaga tgtgetgtea eecagacagt gatgtteeat
                                                                      420
ttctagagca cagaaagaat agattttgca taattcttaa gggccctgag attttcagag
                                                                      480
tggtcaatga gcactggctg taacttaaag tcaccagctg cagtgctcct caaagagagt .
                                                                      540
cagoccatoc tttgaagttt tgaagccaag cgttgacttc tctctagcta tgaaaattct
gcatcttcac taagcttaat catttctagc tctggactta aagtgagaga cttgcaagtc
                                                                      660
tteettteat ttgagttett tgaggeeact gtggttacta attageacce etggtgggtg
                                                                      720
teacecteet eesteeteta tegagtteae etacaceggg gegtggggaa aggegettee
                                                                      780
tgcaccccac atgccctgcg ctcctggggc tctcccacag ggggctttcg tgagccaggc
                                                                      840
agcaagggcc atcoccotgo tocagocoag coaggoagog caggoagaag gactotocoa
                                                                      900
acctgcccgg gcatgcgggg ctitgtgttc actgccctgg cccctccgaa actggggatc
                                                                      960
teccateete agaeteeetg gtggeeteeg aaceecaaca aatgacagga agaecagaac
                                                                     1020
cegeagegeg atggeetget gggegegtge teagtgggae acettgggge ceetcaaget
                                                                     1080
gagtcacagg ggaaaggtgt gcttgcgcca cccacgtccc accggagtcc gtggtgggcc
                                                                     1140
tggagcegea ggtegeeagg geggeatggg aaccegaaga eggggeacet teaceteegg
                                                                     1200
agetegtgae eeeggaggee teegegteaa geacagatge eageeaaceg ggeaeeteee
                                                                     1260
aaccgctcca ggagccgggg ctctcctctg cactcacctc cagcctgtta gatgagctcc
                                                                     1320
tgtcaacccc agagtttcag caaaaggcac aacctttcct agatccggcg ccactggggg
                                                                     1380
agetgaagga egtggaagag eeegetttge tggaaceaet eeteageeag gaagaacaea
                                                                     1440
gggctctgct ggaggagcag gtttggggcgg gtttggggca gggtggcggc ctctctttcg
                                                                    1500
eggtgaacet caggettggt gtggagagge gtgtetteee ttecagetga eetgeetagg
                                                                     1560
atccctgagt tccaggtcca gcgagagact ccacacagag gagggctgtc aacaatgaca
                                                                     1620
agaaagcatt cotgagcatc coggggatcc cagggctggt cocaggtaca gggaggtagg
                                                                     1680
ctgtcctaac tgcatgcgcg ggtttcccag cagcagccta ggatttctaa ctatcccaqq
                                                                     1740
eggagetete atecettttt eeceegegtt etteagtegg gttggeggag aceteagtee
                                                                     1800
gcgaaacact gggccagggc agaagccagg ccagttctcc tttctgcggc tcgactcctc
```

```
egectetteg etcaccatea tgttgecaae eegtgteeeg eeagecteet egecageace
                                                                  1920
                                                                  1980
atagagegee ttgeaactaa ataaagaeee eagaeetege geaaaceagg gtgetgeeet
                                                                  2040
ttccaggcaa gagggaaggc aggcagagat gaggacagga acggagacag agtgagatgg
aaggatggag ctaggcaagg atgggtggaa ggagggaccc cggaagggag agaaagaggg
                                                                  2100
2160
accaagggac aaaaggagca agaagcagag aacggaaggc agagacaaaa acggtcttat
                                                                  2220
gcctccagaa ccaacaggac ccagaactcc gggaaaatgt tgggtgccca gtacaggctg
                                                                  2280
agtgctgggc ccacagcccc gttggccggc ggggcgctca gcggccctct ggatcaccag
                                                                  2340
cctgggttac ttcgtcccgg agcaattcag accaattccg tttccgaagg aatgagcgaa
                                                                  2400
ttccccagag agcaatgagc cgagacccag gtagttgtct gtttttcatc cacatggttc
                                                                  2460
acagatgaca tatececaeg ttgagecetg caacagaget egaggeggat agteceatee
                                                                  2520
acacaggagt cacactcagg ccaactgaag cgtgattctg gattccacgt ttctttgccc
                                                                  2580
totgtaaagg tgootgttgo toaagtttot gooccoogaa agogtgacca tgttgactgt
                                                                  2640
ttegegaget etgtggggee ecagaaactt ecaggaatge gtggaagace ageategtgt
                                                                  2700
eggtgetete ettteeagtt tteaaacagg etatattgga gaeteeceat tttgeaggaa
                                                                  2760
acaggaatec atcatcagge egtgatgeac gggatgttte ttttetetgt ggtttegete
                                                                  2820
tegttgteta egtgaaaaeg aaegagatga acacaaetge gtgtgtgaga etateaegge
                                                                  2880
aactgtgaca cccaggcgtt ggcaatagag ttggcagcct gatcctggga caaaggtact
                                                                  2940
gatggacatc cagacacacc ccaccacaat cactagcaaa cccactccca aacacacaga
                                                                  3000
cacacaeggg egeaegegeg ggaacaeaag cacacaeaca gacacaeaa gacacagaea
                                                                  3060
acttgaagga gagcaaggga cagagggatg agaaatagaa acggaaggag agaaacagcg
                                                                  3120
atggagagag agacagagag gaa
                                                                  3143
```

```
<210> 5836
<211> 863
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (234)...(486)
<223> similar to gi2145052 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5836
tggcgtgtga gtgcggggtg gggtggtggc cgttacgttc tgggcaacgg ctacggcagt
                                                                       60
ggagaagtaa gaagagaaac aacgtccggc gcttccgcct tcgcttagga ggaggaagag
                                                                      120
ctggtaggga aaggaaagtg cttcgccctg ggcctggact ggaccgagtc gggttggtgg
                                                                      180
gggtctgggc tatgagcttt tgagggtcgc ctgggacgcg gagcgagaca cgagagccag
                                                                      240
gagetatgte teageegeeg gegeegeege eteegttgee geegeeacet eeteeeeetg
                                                                      300
aggeteeaca gaeteegteg teettggegt eggeggetge tteggggggg ettttgaage
                                                                      360
ggagagaccg gagaateett teegggaget geeeggatee gaagtgteag gegegtetat
                                                                      420
ttttcccggc ctccggttct gtcagcatcg agtgtaccga gtgcggccag cggcacgagc
                                                                      480
agcaacaget getgggggtt gaggaggtga cegaeeegga egtagtgeta eacaaeetge
                                                                      540
tgcggaacgc gctgctcggg gttacggggg cacccaagaa gaacacggaa ctggtaaagg
                                                                      600
tgatgggcct ttccaactat cactgcaaat tgttgtcgcc catattagct cgctatggaa
                                                                      660
tggacaaaca gacaggccgg gccaagcttc tccgggacat gaaccagggc gaactgttcg
                                                                      720
attgcgcctt actgggtgac cgcgccttcc tcatagaacc agagcatgtt aacactgtgg
                                                                      780
getatggeaa ggacegetee ggaageetee tgtatttgea tgacaetetg gaggacatta
                                                                      840
agcgggccaa taaaagccag gac
                                                                      863
```

```
<210> 5837
<211> 1168
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1169)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (123)...(920)
<221> misc_feature
<222> (123)...(920)
<223> similar to gi21627 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters '
```

```
<400> 5837
attittitti ticacticag actaaattit attaaatatg gigicattig gciacaatcg
                                                                       60
gtttgtettt ataaaactaa gtaaettatt ttgtagtaaa aacaaeeeea aeeeactgee
                                                                      120
cetetttgge agecettgaa acteagttea aagetaggee tggeteeegg ceatggeece
                                                                      180
tgctgccttc acctgctgag cgctctagga agcctcccaa atcccaagtg tcaggcccc
                                                                      240
ggagtecate acctetgeet caaacageea ageecagggg etttggggee geaggtatga
                                                                      300
aggeceetee agtagecaca cetgtgteag ggetgtgeee tggggeetgg ceaacateee
                                                                      360
ccctcccctt gaaccatcag gaactgggca agacgcccac cagaggcttg accacagggg
                                                                      420
gegtgeatee eettetgage etgggagaee etaggggagt gggtageetg ggetggaeee
                                                                      480
ctggtgggct tgtgttctgg atgtcgctat ggcactttgg tcctcaactc aaacccccac
                                                                      540
ccctacccag gagtetgaga cctcggcctt ccctggactt gttgggcaga aaaaggcacc
                                                                      600
aaggacagga tgagaaaccc ggaggggcag ccccacaaat gagggcgctc tgacctgtcc
                                                                      660
teccattgee accecaceca ggaacageee etcaactggt cacagecace aggaageeee
                                                                      720
aggactgete ecacaccaca geagtgeeet ettetecate ecaceeteag gacetaceca
                                                                      780
gggteeteea ggeageeagg ggeeagetee aggaeaggge aggagaatge ggteeaggtë:
                                                                      840
tggcacgtaa ctgagggtgg gtatgctcca gagaagtaag gcaaatggcc cagatgacga
                                                                      900
ccacctgggg tagacccagg gtctccaggg aatggctcgg:gggcagacgc tgtgtctgtg
                                                                      960
tgtgcaggat ctgcccccac cagcaggaaa ggggcaggag ggaggcaaag aggaggtgcc
                                                                     1020
caggacttgt accetggetg ccaagcaggg tggggtgttt tcatgaggat tgcttttaac
                                                                     1080
caaaagteet cageettetg cagacecagg geageggega gttgetetae atcatgtget
                                                                     1140
ttacggaaat concegeget aatecaat
                                                                     1168
```

```
<210> 5838
<211> 1345
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1)...(1346)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1287)...(295)
<223> similar to gi1263289 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5838
tttttttttt ttcctqtqta caaaatqttt aattttqaca aaqcaqttaa aaqqctaggq
                                                                      60
tggcccttct gcagccactg gtgactggga agagtgctct agggacactg gccaccccc
                                                                      120
tgctcctgtc ttcagacctc tgctctggga ttgggtccaa ccctgtcctt tgcagccatg
                                                                      180
tqqcqatcct caqcatggag ctccttgcca ctgtccccca aaggggctca gtcgtccatc
                                                                      240
ttcacgaaga ctttgggccg agaaaagatc ttgatggcct cctctacctg caccagcttc
eggtecaget cageaeggtg getetgggge teteagtgag tetgececag caggeageag
                                                                      360
taccagetea egeageaget ggetetgget etggageage ttggteagtg tttecageeg
                                                                      420
etggttetea ggeatgegeg tgtggeetgg gggeatggea gggteegget ggetetgett
                                                                      480
                                                                      540
gegggeeteg geeteeegee geeacaggte cetgegetee aacaagtaat gtggcacatg
                                                                      600
gecettetge gtggcattgt agtgeteetg ggcetgeege tgetgeteta geaettgtge
caggacetge agtgageagg aatgeeteeg gggggetete ttggeagete gtgeattgtg
                                                                      660
acgaatgaag tecaceecca ggeetggete ettagetteg ggacetggtg gggttggetg
                                                                      720
                                                                      780
gggactagat acatggggtg gtgggaggcc agggccgcag cgggagtgcg cccgcaggaa
gtgggcagac tctgtcccag aggcagggcc aggctcctgg agctgggcct tgacccggga
                                                                      840
ctccaccttg tegtacttgg gtgagegeea cagagettte aggggeetgg getggeeetg
                                                                      900
                                                                      960
ctcccggctg cgctcctgtt ctctgaagcg cttctgaatc tccctgatcc gcctcaggtt
ctecttetea tygteettag ggteetteet ettgagagag geeccaggae etagggagat
                                                                     1020
cccctcgagt tgcaacagca cgtccccgac gccgcgctgg ccgcgctcca ggatctctcc
                                                                     1080
ggcaccggga ccgatgcagg ggccacgggg agcggtggtg tccagggccc ggtcggaagt
                                                                     1140
cagcaagtee agetteageg egttteeete gaggegeeet tgageegagg teggeegeet
                                                                     1200
gtagttgtca ggacagagcg tegggtetgg ggggatgggc ceegagatge gggacgggce
                                                                     1260
ctegeacatg cegeeggege egeecageaa eggtgeetga etaanggtee teaannetag
                                                                     1320
tgtctacaaa gggggcgggg cgcgg
                                                                     1345
```

```
<210> 5839
<211> 3101
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3102)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (791)...(1423)
<223> similar to gi4886481 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5839 ttgtatctag ctctccacca gcagaatggt ggtccgggca gcgttccggg aatcactctg 60 cetttgeatg tggtagteeg gagaagatee tgattgeeca cateagacag tgtgggetge 120 agatteetta tgaggeagaa ataggtttte atetttteea tgeteeagag ettetetgat 180 ttgcttgggt aacctttatt ttctaagata aaggaggaaa tgatacgatc ccagtcttca 240 ttettggtat caagcaaaac caggateagg teaaategae ttaagagtgg getgeegagg 300 gcaatgttca cagacacgga ctcctggggg tcgtactggc ctttgggggtt cgttgctgcc 360 aggatggtgg teettgtgtt cagettgeae aegaggtttg tteteegeet ttgteetaat 420 ccacaccage aggtggagee geagttaaag ttteegagte catteeggga gegggageee 480 atcttgctgg ctgccgaggc cctcgctgga ggaggagggt cagaactcgg gtgcagccaa 540 tcgagggcaa cgctgctact tataagagca gaatgggcng gnnctcgtag tttagtgaaa 600 taggaaagct gcaaaacact gtggagtgct cccgtgtaaa taaaaagagg aaaaaagttt 660 ctcaagtcgc cgctgcacga cgtctggccg gcgctggagc gggggtctgc gctctcccga 720 geggeegege getggaettt attgtgeege aaccageece agtteeeatt gtttgtgttt 780 ttttcaaaat atggcaaagg ttcaggtgaa caatgtagtg gtgctggata accettctcc 840 tttctacaac ccgttccagt tcgagatcac cttcgagtgc atcgaggacc tgtctgaaga 900 cttggaatgg aaaattatct atgtgggctc tgcagaaagt gaagaatacg atcaagtttt. 960 agactotgit ttagtgggto otgitocogo aggaaggoat atgitigiat ticaggotga 1020 tgcacctaat ccaggactca ttccagatgc agatgcagtt aaggcgtaaa ctggttgggc 1080 ctaattactt ggtacctatc cgaggacaag aatttattaa gaagttgggc taattaatgt 1140 aaataatgaa tatactggag acagaattaa ggggaaaatc caccagtaaa acccagactt 1200 ttectaaget teaaaggaat attttggeat eetaateeee agggteacaa gatteeacat 1260 taattgggaa gataacacag aaaaactgga agatgcagag agcagtaatc caaatctaca 1320 gtcacttctt tcaacagatg cattaccttc agcatcaaag ggatggtcca catcagaaaa 1380 ctcactaaat gtcatgttag aatcccacat ggactgcatg tgaccaccta ccatcccttt 1440 agtacaaatt aagctattaa aaatacacag aactatttcc ctgaaattcc gtaagtacat 1500 agtcaaaaca caatgtgaag aatttgttta aaaacatcct gtagaaagtt tataagaaaa 1560 ccagtatttg aacaaattgt ggaatataaa tacaactatt ttaaggtaat ttttttctct 1620 aatgtgttat tttatttgtt ctgaaactaa tctgattaaa gcatatatat tattttcttc 1680 teetttatat gtaatgaaag caettataaa gaaacaggaa teattagace aggttgtaaa 1740 gatgtettgg ceteceagae agtetttgga ceactatttt aetggeettt gaaagaacaa 1800 agtttacttc aactaaaatg tttcttcctg tgaagacata tggtatcatt ttaatttaag 1860 gggcagattt ccattetttt ttggcatgte ettaaaaaga ggatttgaaa teaactatat 1920 gctaccaaga actttaggat ccaattttcc aagccaccgt gaagcctctt atggctacta 1980 ttatagttca tgagatgttg gacagcattt ggtttgtttg gtaagagaag aacaaatatg 2040 gctaattgtt aataaggtcc cctggctatg gtttttgttc ttataacaga gtttagaata 2100 tcagagcatt tcttgaatca tacatcatta ttgtccagtg aattcaagac caaatacaat 2160 ategggagaa aatacaaact eeetgtgttt aagaataggg gattataatg geteaaattg 2220 gttcatttga tttctaaaaa taccatgacc tttaaaaatt cttttaatag atcatgttat 2280 tggcagtatt tatataaaaa ccatggattt agaaaggtat atttagcttt attataatag 2340 atacgttact attttggaaa tatatatatt ttcacacctg tagtactctt ccccatttcc 2400 tetgacaete atgeagaatg agateaggea tatttgtggt tgacataete tagatagett 2460 ttccaacaaa tetttgaaaa geaatettgg aaaggaatte attaaetaaa tggggtaaaa 2520 ggtttctttt tctttgagag ttaagtcctt cctcaaaaaa attttcttat gctccataaa 2580 attgaggtag aatattttcc attattcttg ccagctaagc aagacagccc atatgatgca 2640 ggttatgcag tgccttcata tcttaaaact tttaatactg caccttttta aagcttttat 2700 -gttgagggca agggaaaagg ggcatttgtc gtaaacatgg attctgagtt gtatatattc 2760 cccatccatt cctaaaaaag tgaatttgtg aagcaaagtt ttgcccagat gttaaacttt 2820 gaatttaata taccagatta ttaaaatatt gtccattaac tagttcatag attttaaaag 2880 taaaatactt ctgactgtta aaactatata aagaaaatct catttgtcta attgcaatta 2940 aaagaaaaat gttaaaatat taaaatgaaa ataaaagcat tactttccaa caaagagctc 3000 agtggttaat ataataggaa caacatatgt gcttattaga aataaagcat atacagccaa 3060 atcaccaaat aaagccattt actgctgagt ttttatcgga a 3101

```
<210> 5840
<211> 2829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (217)...(1550)
<223> similar to gi1707274 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5840
cccacgegte cgacgaccac gggceggaag getgecagge ccagtgggca agegaagaaa
                                                                       60
tgaaccaccg caacgcgggc gcttcggggc ggggccgagt gcgaacctga gccccaaatc/
                                                                      120
ccgacccagg caggggggg gcccggagcg gggccttgga ggcccagccc gcgcggcgac
                                                                      180
gtctccgcgt ggcgtcacgg caccgactga cggccaccca ccatggccgc agaccagcgc.
                                                                      240
cegaaggeeg acaegetgge cetgaggeaa eggeteatea getetteetg cagaetettt
                                                                      300
tttcccgagg atcctgttaa gattgtccgg gcccaagggc agtacatgta cgatgaacag
                                                                      360
ggggcagaat acategattg cateageaat gtggegeaeg ttgggeaetg ecaecetete
                                                                      420
gtggtccaag cagcacatga gcagaaccag gtgctcaaca ccaacagccg gtacctgcat
                                                                      480
gacaacatcg tggactatgc gcagaggctg tcagagaccc tgccggagca gctctgtgtg
                                                                      540
ttctatttcc tgaattctgg gtcagaagcc aatgacctgg ccctgaggct ggctcgccac
                                                                      600
tacacgggac accaggacgt ggtggtatta gatcatgcgt atcacggcca cctgagctcc
                                                                      660
etgattgaca teagteeeta caagtteege aacetggatg geeagaagga gtgggteeae
                                                                      720
gtggcacctc tcccagacac ctaccggggc ccctaccggg aggaccaccc caacccatgt
                                                                      780
ggaggatgga ctggaaaagg cattcagtta gaaacgtgtg gtccaaggaa gaaacaggca
                                                                      840
aatetgeagg aggeagattg cageettett egetgagtet etgeecagtg tgggagggea
                                                                      900
gatcattece ectgetgget acttetecea agtggeagag cacateegea aggeeggagg
                                                                      960
ggtctttgtt gcagatgaga tccaggttgg ctttggccgg gtaggcaagc acttctgggc
                                                                     1020
cttccagctc cagggaaaag acttcgtccc tgacatcgtc accatgggca agtccattgg
                                                                     1080
caacggccac cetgttgcet gegtggeege aacceageet gtggegaggg catttgaage
                                                                     1140
caccggcgtt gagtacttca acacgtttgg gggcagccca gtgtcctgcg ctgtggggct
                                                                     1200
ggccgtcctg aatgtcttgg agaaggagca gctccaggat catgccacca gtgtaggcag
                                                                     1260
cttcctgatg cagctcctcg ggcagcaaaa aatcaaacat cccatcgtcg gggatgtcag
                                                                     1320
gggtgttggg ctcttcattg gtgtggatct gatcaaagat gaggccacaa ggacaccagc
                                                                     1380
aactgaagag getgeetaet tggtateaag getgaaggag aactaegttt tgetgageae
                                                                     1440
tgatggccct gggaggaaca tcctgaagtt taagccccca atgtgcttca gcctggacaa
                                                                     1500
tgcacggcag gtggtggcaa agctggatgc cattctgact gacatggaag agaaggtgag
                                                                     1560
aagttgtgaa acgetgagge tecageeeta ageeageeet getetgeeta agtgtactee
                                                                     1620
agaagaaact catctcatcc aaatacacgc tattgagaag gegageetga eeteeetett
                                                                     1680
acagataaag tcagctttca gaggctcagg gtggggggc ctgcccgagg ccataatgct
                                                                     1740
acceacece tectectaac caetggtetg ttggaataac ceagatgtet geateceete
                                                                     1800
aagtcagtca atttcctttc tgtccactgg gggtggaatg gggtagggtg ggatacttta
                                                                     1860
aagtgctcct gcttaaataa attagaccag accagtgtat ttctaaagaa aatcctgaca
                                                                     1920
tgcacaccca ttaaaaatag tacattttac agtgtcccag tcatactttt aattggcaaa
                                                                     1980
ttaaaataat gcaatetgat atattetate etaetaaatt aaaaataetg aatataacea
                                                                     2040
actaaatata cttactccta agactcacta ccagtagttt cacttaaact ctgccttaga
                                                                     2100
ggctcttccc acccatttcc cattatggca catagagaaa aaggcctcta tcactgtcca
                                                                     2160
ctggagtaat aaccactget teceetaact geeteaaaga etgteatttt atagaaaatt
                                                                     2220
taagactate etaateeact ettteeaaac teecageeag gatagagact teeaggagtt
                                                                     2280
```

```
2340
ccacctgtcc caccttatct ggctgccaac tcctgctcag aaacagaacc tgccacaccc
tgccactgca ggccgcaacc tcaactccca actgccaact tgaagcctga actacccttt
                                                                     2400
ccctgaccag agttcaggag gggaagagct acacctccct gcacatgaat ccactcattt
                                                                     2460
                                                                     2520
gaaagcacaa ctgaccctgg atttaagctg gccaggaccc tgggagatct ttggaaggat
                                                                     2580
ttttgcctgg gtttagggtt aacttaaaga ggtgcccaga agaccaagtg aggcagttca
tgcctgtaat cccaacactt tacaaggcca aggcagagga tggcttgagc ccaggcaaca
                                                                     2640
                                                                     2700
tggtgagacc aggctttaaa aaaacatatg agccaggcat ggtggtacat gcctgtggtc
ccagctactc gagaggctga gatgggagga tccggtccgc ccatgaggtc aaggttgcag
                                                                     2760
                                                                     2820
tgagecatga ttgtgttace geaceceage etggacaaca aageaagaet etgteteaaa
gcaaaaaaa
                                                                     2829
```

```
<210> 5841
<211> 2320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (337)...(1978)
<223> similar to gi915208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5841 ggetteagge ttteaceagt teteaggatg eccataggga tgggtgaage etgeetggee 60 tgtggtgctt tccagtggcc gtcattttat tagggcccca cagtggcatt aggatgcacc 120 totoggoggt gitcaacgcc ctcctggtgt cggtgctggc agcggtcctg tggaagcatg 180 tgcggctgcg tgagcatgca gccacactgg aggaggagct ggccctcagc cgacaggcca 240 cagagecage eccageactg aggategaet accegaagge actgeagate etgatggagg 300 geggeacaca catggtgtge aegggeegea egeacacaga eegeatetge egetteaagt 360 ggetetgeta etecaaegag getgaggagt teatettett eeatggeaae acetetgtea 420 tgctgcccaa cctgggctcc cggcgcttcc agccagccct gctcgaccta tccaccgtgg 480 aggaccacaa cactcagtac ttcaacttcg tggagctgcc tgctgctgcc ctgcgcttca 540 tgcccaagcc ggtgttcgtg ccagacgtgg ccctcatcgc caaccgcttc aaccccgaca 600 aceteatgea egtettteat gaegaeetge tgeeaetett etacaeeetg eggeagttte 660 ccggcctggc ccacgaggca cggctcttct tcatggaggg ctggggcgag ggtgcacact 720 tegaceteta caagetgete ageeecaage ageeteteet gegggeacag etgaagaeee 780 tgggccggct gctgtgcttc tcccatgctt ttgtgggcct ctccaagatc actacctggt 840 accagtatgg ctttgtgcag ccccagggcc cgaaggccaa catcctcgtc tcaggcaatg 900 agateeggea gtttgeaegg tteatgaeag aaaagetgaa egtgageeae aeaggagtee 960 ecctaggega ggagtacatt etggtettta geegaaceca gaacagacte attetgaatg 1020 aggcagaget getgetggea etggeecagg agttecagat gaagacagtg acagtgteec 1080 tggaggacca cacctttgct gatgtcgtgc ggctggtcag caatgcctcc atgctggtca 1140 gcatgcatgg ggcccagctg gtcaccaccc tcttcctgcc ccgtggggca actgtggtag 1200 agetettece atatgetgte aatecegace actaeactee etataagaeg etggeeatge 1260 tgcctggcat ggacctccag tatgtagcct ggcggaacat gatgccagag aacacagtca 1320 cacaccetga geggécetgg gatcaggggg geatcaééca tétggacegg getgageaag 1380 ecegtateet geaaageegt gaggteecae ggeatetetg ttgeeggaae eeegagtgge 1440 tetteegaat etaceaggae aceaaggtgg acateceate eeteatteaa aceataegge 1500 gcgtggtgaa gggccggcca ggaccacgga agcagaagtg gacagtcggc ctatatccag 1560 gcaaggtgcg ggaggcacgg tgccaggcgt cagtgcatgg cgcctccgag gcccgcctca 1620

```
ctgtctcctg gcagatccca tggaacctta aatacctgaa ggtgagggag gtgaagtacg
                                                                     1680
aggtqtqqct gcagqaqcaq ggggagaaca cctacgtgcc ttacatcctg gctctqcaga
                                                                     1740
accacacett cactgagaac atcaageeet teaccaceta cetggtgtgg gteegetgea
                                                                     1800
tetteaacaa gateeteetg ggaceetttg cagatgtget ggtgtgcaac acgtagegag
                                                                     1860
caggecacag cetggeeteg ggaaggtgge teetgeagtt cagegteeet gggeeeatta
                                                                     1920
atcccactgt ggagacttct gggaactatt tattgagcag gcctgtgcct ccacatcatc
                                                                     1980
ttgttgtctc tggggtgtgg tgtcacagca ctcctctttg ccctagagat aagggacctg
                                                                     2040
actteceett eteceateet gaacatttgt acceetggag aagtteetta geagggagga
                                                                     2100
ggaagaggag aggaggaagc aaagaatcac aaggaacctc tggctaggtg atcctgatgt
                                                                     2160
ttcctactga gtttttctgg tatccagatt tctggaaacc gagtaatcat gtactgtttg
                                                                     2220
attgggtggt teatetgett ceateceagt gaaatttace tgtageeeag tgaagggtgt
                                                                     228Ò
gtttggaaca ttcattaaat gattctaagc aaaaaaaaa
                                                                     2320
```

```
<210> 5842
<211> 4331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4133)...(2522)
<223> similar to gil663704 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5842
atctctgtct aggggtcaca aattgaaatg gcaagtgctt ttccattcaa tctaatactt
                                                                       60
ccggattcct actaaaaagg aatacattaa gagcatggaa aagttgctta ctgaaaggaa
                                                                      120
acccccgaag agtaagggag ggaatgtaga aattaagaag ttatgtggaa tactctttaa
                                                                      180
attgtaatta actacatttt cttattttca cagtaataca aaacacagtc acttgcagaa
                                                                      240
ctggttcaga ttacttaaat accagataca tttttagtcc tctacataag tgtttgggag
                                                                      300
ttacttatgt ttatatgaaa tgaagctatt aatacttttc tactgaatat ataatatgat
                                                                      360
cccatttatt taaaaaataa agattacata tttgcttata tacgcataca aattttctga
                                                                      420
aaattacata agaaattgtt aatagattac ctctggagaa tagtactggg gtaagaggtg
                                                                      480
agggggcaga attctcattt tacagcctta tatactgttg tgaatttttt tttttaccat
                                                                      540
gtacttttta aaaatacaaa attgaggagg gaacctccta ctccaaaatt acgaagcatt
                                                                      600
cttttatgta catttctcta agagttatat ttgatatttt tcaaggcaaa ctgacttgag
                                                                      660
gtactcgatg tttttaaatg tatttctaat aattattaqt aqqqtcacac ctatttqaca
                                                                      720
gcttttttaa aaagtcacat attgctgtat ttttaaagat gacaaacctt tatttaaatq
                                                                      780
agatgcttgc tggagatttt ctttttcaaa ctcacttttt aagttatgga aataatatca
                                                                      840
ctgctgaaag tttggaaaac atatataagg gtgccaaaaa taccactaaa atcacataaa
                                                                      900
ccaatcttac cattattaat ggtgtgattt ctttctttac atatctatta atacctagta
                                                                      960
ctatctatgt agaaaatgtg tttgcaaagc tgagatcaca ctgtacctat agctctggat
                                                                     1020
cctgctgctt tttcccccaa cacttaacag atgctcagta aacatgttaa accaagttgt
                                                                     1080
taattagtat tgtaccattt ctcctcatca aaaattactt ctatagaagg catttagttg
                                                                   P 1140
gtttccagtt cttgagtaaa ataaataaca cttaatgagt atgtctttac ctaaacattg
                                                                     1200
totgoattta tgatttagaa gaagotactg gatcaaacgg tatgaaatat tttaagttto
                                                                     1260
tgataaatgt ttttcagaag aattatactg gttttcactc ctaccaacag cgcagcctgt
                                                                     1320
gttgctgttt ccttgccaac actgtcacca ttttaaaaag tcactgttat ttcacaggta
                                                                     1380
aaaaatagaa agtttgctct gagaaaattt cttcctccca ttacaaaata aagtcacagt
                                                                     1440
ctttccgtat gtccactcta gagtgctatc ttccaatcta aaacagagga actgttttca
                                                                     1500
```

```
aacatcatta gtttagcggt ctccactaac aaagacatac ggataaagta acatgtaagt
                                                                     1560
cagattaaga atctcaactt tttaagaaaa accaaatgac taaaggcata tttttattct
                                                                     1620
atactttttg tcctataggt actctaggtc cttgtgtaat tattgaggac aaaacqtcaq
                                                                     1680
ttaaaggtga gagggaaaac taggttgcag actagcagct gttttgcatc tcacaagaac
                                                                     1740
aaaggeetta acaaacegta taetttatge aaacaaagtg atgeeteact gaettaggag
                                                                     1800
acaagtcaca tgccatcagt gtgtcagaaa atttctttct tcagtgatag ttaaggtaac
                                                                     1860
ctcgccagct actttccaga gacagctcca gggcaatact ggggaaaaaa aaaatcagag
                                                                     1920
acataggacc tcaatagagc cctgtgcaac aaaaagatgc tagataacaa aactcaaagc
                                                                     1980
aaaactaaga tcattccaat ttaggggaaa gtttttttat tcagtgttta agattaaaaa
                                                                     2040
ctacaagatt ttgcttgcag ctgatgagta aaaagagaag ttaaacataa attctcatct
                                                                     2100
gagtggctag ttaaaatgct ctgacaccga gtcaagttac tcagtgacat accagttact
                                                                     2160
ttgggettaa gagtettgga geaaagtage tetaaacaaa acgtgteate tgaagcatag
                                                                     2220-
ggctaatggg catatgaaat actaaataag aagctgatgg aggcaggctg tggcagattt
                                                                     2280
ttggttcttt tagggttcta gcagtggttg ccatataagc aaggacctag cagagagtta
                                                                     2340
tttcctgtct ttacttttct gagttaaaca ccttcaaccc acacccacta agcaggaata
                                                                     2400
aagagacatt ttatagacca gttggaaaat ataaagcagt cccacttctc cagtagaatt
                                                                     2460
ttagttgaat taaatcataa gagaaacaat gattattgca catattatac ttgtcacact
                                                                     2520
acatetgttg agtggaattt ceattecaag tgttgtttte atetteacea teatettgag
                                                                     2580
tecttaatet ataaatttte ceeteetttt taaagtegte teeaegtttt teeageaete
                                                                     2640
tttttctcac tggttccctt ttttctgatt tgctagatga tgcagggttt gggggttctg
                                                                     2700
acgatgttac tetcactgaa gtetgtgtgg gaggeggatt aetaaacaag aaattgetaa
                                                                     2760
ttaatotoca gatggcaagg aatggataaa gcactgttoc caacaaggto caaatgtoto
                                                                     2820
cgctggaaga gtgtacaatg gatgcagttg gtcttcctgc ctagaaatta ataaacaaac
                                                                     2880
tggcaacagt accaccgaag cgcttggggc aagttccaaa tccagtaact tctttttata
                                                                     2940
atcttettig gtaaatteee teetgggaaa catggttget aacgaaaaat taecgtaagt
                                                                     3000
                                                                     3060
gttgccaaca gtctgtgcag caaactgcct tgcctcttct agaggagcat cagaagggaa
ctgatttgta aaggaagaac catcaggaag acggaattga attcttgcaa cagtgcttct
                                                                     3120
ttotottgca taagattooc tottgaotto catttotgoc tgttttgcta gcaaggcago
                                                                     3180
agctttggca gcctctactt cttcctttgt ctttgcaaaa cgagcagctc tctctgcacg
                                                                     3240
gtocaatgca atotgotigtt ttatacgtto togagetgco ctatettotq ctttetetet
                                                                     3300
gtttetttee tecageatte tttttgttaa ttettettet tgttttettt tataatecaa
                                                                     3360
cattletttt ccagtttttc tcctctcaat ttccttctta atttctctct qttcttcctc
                                                                     3420
ttttetttte tettetetee tttetteaag tttttttgtt agtettteea eteggatgtt
                                                                     3480
gaggtcctct gcaggtctct gatctgagca tccactaggc tcctgagagg aagtggcatg
                                                                     3540
gcctgcactt tetectectg ttgcagtate tgactttgta tcagaagtgg atggtatete
                                                                     3600
acaaagetet geatttetgg actgagagtt tteacaagtg ttgttaggtt caaatgaege
                                                                     3660
agatggagta gacactgaac tttctgactg actgccattt gctactgatg tttcactttt
                                                                     3720
tagcaaatgc atctgtcgga ccttgtgaat tcttgtaaca agttcatctg cagaaacact
                                                                     3780
                                                                     3840
tectgetatt aettecaagg gaattecaet gtetecaata aagaaactgg atggaacaea
cactacagga tagatttgtg aaaactgtag gcaggcttca cttttggtat cgattttaat
                                                                     3900
agcaacaaaa ctgtttgaag atgcttctgt aactttatca tcttcccaac ttgcaqccat
                                                                     3960
ctgtgtagac tgttcatcat cacctgccac gaacaccacg aagaccgcgc cgctcctttt
                                                                     4020
ggccgtcgcg atggcggccg gaatggcgcc ctggaaccac agcatcgctc ccttcgggcc
                                                                     4080
caggegeteg cteggtgtgt agteteegea gteeegaage eggeteegee eteegtette
                                                                     4140
gteeggetet geggeeeeg caacettgge tggtteggee cecaceteeg geteegeaca
                                                                     4200
agegegeacg ceegteageg geacceggag aegegegeta gegegegeqa qaacacetea
                                                                     4260
cgtcacagtc gcaacccgtc ggtgtccgtg ccccaggacc ttctctcgtt ggcgagtcga
                                                                     4320
tggtcggcgc a
                                                                     4331
```

<210> 5843

<211> 2077

<212>. DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (48)...(2079)
<223> similar to gi35483 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5843
cggccgcagc tccccggcgg aggcaagagg tggttggggg ggggactttg gctgacgttt
                                                                       60
tecegggeaa egacteeaeg gegteteagg aegtggeeaa eegettegee egeaaagggg
                                                                      120
cgctgaggca gaagaacgtg cacgaggtga aggaccacaa attcatcgcg cgcttcttca
                                                                      180
ageageeeae ettetgeage eactgeaceg actteatetg ggggtttggg aaacaagget
                                                                      240
tecagtgeea agtitgetgt titgtggtee acaagatggt gecatgaatt tgttactitt
                                                                      300
tettgteegg ggtgeggata aggggaeeeg acaettgatg acceeaggag geaageeaca
                                                                      360
aggttccaaa atccacactt tacggaagcc ccaccttctt gcgatcactt gtgggttcac
                                                                      420
tgctctatgg acttatccat caagggatga aatgtgacac ctgcgatatg aacgttcaca
                                                                      480
agcaatgegt teateaatgt eeceageete tgeggaatgg tteacaetga gaagaggggg
                                                                      540
eggatttace taaaggetga ggttgetgat gaaaagetee atgteacagt aegagatgea
                                                                      600
aaaaatctaa tooctatgga tooaaacggg otttoagato ottatgtgaa gotgaaactt
                                                                      660
attectgate ccaaggaatg aaagcaagca aaaaaccaaa accateeget ccacactaaa
                                                                      720
tecgeagtgg aatgagteet ttacatteaa attgaaaeet teagacaaag acegaegaet
                                                                      780
gtctgtagaa atctgggact gggatcgaac aacaaggaat gacttcatgg gatccctttc
                                                                      840.
ctttggagtt tcggagctga tgaagatgcc ggccagtgga tggtacaagt tgcttaacca
                                                                      900
agaagaaggt gagtactaca acgtacccat teeggaaggg gacgaggaag gaaacatgga
                                                                      960
actcaggcag aaattcgaga aagccaaact tggccctgct ggcaacaaag tcatcagtcc
                                                                     1020
ctctgaagac aggaaacaac cttccaacaa ccttgaccga gtgaaactca cggacttcaa
                                                                     1080
tttcctcatg gtgttgggaa aggggagttt tggaaaggtg atqcttqccq acaqqaagg
cacagaagaa ctgtatgcaa tcaaaatcct gaagaaggat qtqqtqattc aqqatqatqa
                                                                     1200
cgtggagtgc accatggtag aaaagcgagt cttggccctg cttgacaaac ccccgttctt
                                                                     1260
gacgcagctg cactcotgct tocagacagt ggatcggctg tacttcgtca tggaatatgt
                                                                     1320
caacggtggg gacctcatgt accacattca gcaagtagga aaatttaagg aaccacaagc
                                                                     1380
agtattctat gcggcagaga tttccatcgg attgttcttt cttcataaaa gaggaatcat
                                                                     1440
ttatagggat ctgaagttag ataacgtcat gttggattca gaaggacata tcaaaattgc
                                                                     1500
tgactttggg atgtgcaagg aacacatgat ggatggagtc acgaccaqqa ccttctqtqq
                                                                     1560
gactccagat tatategeee cagagataat egettateag eegtatggaa aatetgtgga
                                                                     1620
ctggtgggcc tatggcgtcc tgttgtatga aatgcttgcc gggcagcctc catttgatgg
                                                                     1680
tgaagatgaa gacgagctat ttcagtctat catggagcac aacgtttcct atccaaaatc
                                                                     1740
cttgtccaag gaggctgttt ctatctgcaa aggactgatg accaaacacc cagccaagcg
                                                                     1800
gctgggctgt gggcctgagg gggagaggga cgtgagagag catgccttct tccggaggat
                                                                     1860
cgactgggaa aaactggaga acagggagat ccagccacca ttcaaqccca aaqtqtqtqq
                                                                     1920
caaaggagca gagaactttg acaagttett cacacgagga cagecegtet taacaccace
                                                                     1980
tgatcagctg gttattgcta acatagacca gtctgatttt gaagggttct cgtatqtcaa
                                                                     2040
ccccagttt gtgcacccca tcttacagag tgcagta
                                                                     2077
```

```
<210> 5844
```

<220>

<211> 2268

<212> DNA

<213> Homo sapiens

```
<221> misc_feature
<222> (1)...(2269)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (116)...(1880)
<223> similar to gi4877951 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5844
gccgagccga gctgggggcg cagagcgcgg gagggcggcg gcggcgcgga gcccaggtgg
                                                                       60
ctccgctgcc ggatgggagt gccccagtgt gctggatgaa gctggcgcat gcaccatgtc
                                                                      120
atcatgtgtc tctagccagc ccagcagcaa ccgggccgcc ccccaggatg agctgggggg
                                                                      180
caggggcagc agcagcagcg aaaqccaqaa qccctqtqaq qccctqcqqq qcctctcatc
                                                                      240
cttgagcatc cacctgggca tggagtcctt cattgtggtc accgagtgtg agccgggctg
                                                                      300
tgetgtggae eteggettgg egegggaeeg geeeetggag geegatggee aagaggteee
                                                                      360
cettgacace teegggteec aggeeeggee ecacetetee ggtegeaage tgtetetgea
                                                                      420
agageggtee cagggtggge tggcageegg tggcageetg gacatgaaeg gacgetgcat
                                                                      480
etgecegtee etgecetaet caccegteag etcecegeag tectegeete ggetgeceeg
                                                                      540
geggeegaca gtggagtete accaegtete cateaegggt atgeaggaet gtgtgeaget
                                                                      600
gaatcagtat accetgaagg atgaaattgg aaagggetee tatggtgteg teaagttgge
                                                                      660
ctacaatgaa aatgacaata cctactatgc aatgaaggtg ctgtccaaaa agaagctgat
                                                                      720
ceggcaggec gettttccac gtegecetec acceegagge acceggecag etectggagg
                                                                      780
ctgcatccag cccaggggcc ccattggagc aggtgtacca ggaaattgcc catcctcaag
                                                                      840
aagctggacc accccaatgt ggtcnaagct ggtggaggtc ctgggatgac cccaatgagg
                                                                      900
accatctgta catggtgttc cgaactggtc aaccaagggc ccgtgatgga agtgcccacc
                                                                      960
ctcaaaccac tctctgaaga ccaggcccgt ttctacttcc aggatctgat caaaggcatc
                                                                     1020
gagtacttac actaccagaa gatcatccac ccgtgacatc aaaccttcca acctcctggt
                                                                     1080
eggagaagat gggcacatca agategetga etttggtgtg agcaatgaat teaagggcag :
                                                                    1140
tgacgcgctc ctctccaaca ccgtgggcac gcccgccttc atggctcccg agtcgctctc
                                                                     1200
tgagacccgc aagatattct ctgggaaggc cttggatgtt tgggccatgg gtqtqacact
                                                                     1260
atactgettt gtetttgget agtgeecatt catggaegag eggateatgt gtttacaeag
                                                                     1320
taagatcaag agtcaggccc tggaatttcc agaccagccc gacatagctg aggacttgaa
                                                                     1380
ggacctgatc acceptatge tggacaagaa cecegagteg aggategtgg tgeeggaaat
                                                                     1440
caagctgcac ccctgggtca cgaggcatgg ggcggagccg ttgccgtcgg aggatgagaa
                                                                     1500
ctgcacgctg gtcgaagtga ctgaagagga ggtcgagaac tcagtcaaac acattcccag
                                                                     1560
cttggcaacc gtgatcctgg tgaagaccat gatacgtaaa cgctcctttg ggaacccatt
                                                                     1620
cgagggcagc cggcgggagg aacgctcact gtcagcgcct ggaaacttgc tcaccaaaaa
                                                                     1680
accaaccagg gaatgtgagt ccctgtctga gctcaagacc tagaaaataa gtccccttcc
                                                                     1740
tgcctgttgc aaagtaacgt aagagttccc tcacccgagt ggatgcagac cttcttgctg
                                                                     1800
tcagccaccc ttccttcata cacatagcca gcccaggtga ccagaacctc ccaggacaga
                                                                     1860
tgaggetttg tgteettatg agaetgggag aacetgetgg geaeceetge tgeaqqtqet
                                                                     1920
gtggtgggtg gggaccccac tgcccttccc actgagcaca tcgtqqctac ctqacttqqt
                                                                     1980
gggagctcca ggcagtcact tctgtttctt aaacatagct ttactgaggt acaattcaca
                                                                     2040
taccatgtaa ttcacccacg ggaagtgtat gattcagtgg tttctaatac agacttctqc
                                                                     2100
agccattace accateaact ttacgacatt tteateagee caagaagaea eectacaete
                                                                     2160
cttagctgtc cccatccaac tcccccaccc cagtaaccac tcagaatagg tatggatttg
                                                                     2220
cctattctgg acgtttcgta taaatggcgt catacactaa aaaaaaaa
                                                                     2268
```

```
<210> 5845
<211> 2363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2364)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2198)...(915)
<223> similar to gi35435 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5845 actataccga gagactgaag aagtggaaat atatgtggaa cagagccttc ctccatggta 60 tgaaatagat ttcctttaaa aaataaaaaa aaaagaagtg aacaatataa gcatattact 120 tagaaacatg gaggtatata cctgaaaaac tcaagagttg aaagtggtca cctctgggga 180 gtgggaatct tgaatgggag gaatgggctg gggctttttt gttataagcc ttgacttttt 240 aaattatgat catgtgtaac tgataaaaat aaaagttaga ataaaagccc tagcacaatg 300 totgocataa agtaggocot tgataaagaa tggacattta totaattgto coatototoo 360 acggotgotg coccaetttt tgcattcago aatatagaca tttgatccgt tcctcaagat 420 totattotoc coottoctaa caaagtatgg caggaaaaaa aaaaaatcac ggtttcaatg 480 gacactitta tigittacti aaiggatcat caattitigic tcactaccia caaaiggaat 540 ttcatcttgt ttccatgctg agtagtgaaa cagtgacaaa gctaatcata ataacctaca 600 tcaaaagaga actaagctaa cactgctcac tttcttttta acaggcaaaa tataaatata 660 tgcactctag aatgcacaat ggtttagtca ctaaaaaaatt caaatgggat cttgaagaat 720 gtatgcaaat ccagggtgca gtgaagatga gctgagatgc tgtgcaactg tttaagggtt 780 cctggcactg catctcttgg ccactagctg aatcttgaca tggaaggttt tagctaatgc 840 caagtggaga tgcagaaaat gctaagttga cttaggggct gtgcacagga actaaaaqgc 900 aggaaagtac taaatattgc tgagagcatc caccccagtg aaggacgttt acacttcaag 960 gagetecaaa actgggeace acceeceag tgaeteaaca tggetggaet tttateetee 1020 ggtgttccca tttgggcaac agccaagtgg gcaggtgtct ccaaccaacc tatgatggtg 1080 atggcaagee ceetagaagt ggathtgett teacecacet cateeatgag agetttggtt 1140 ccccggggca aaagetteec attcaaatac ccccacagga ccattccaca caatetgett 1200 agcccgagtg acagecteag catacttett getgetttea ggaccacagt ccaageceat 1260 ccagccagca ggtatgccag aagccacagt ggcttggcca gtcttggcat tctcatcaaa 1320 cttgtcagca gtgacaaagt caacaggcaa ggtaatette acaccattet tetcagettt 1380 ggacattagg tetttgacaa tettggetee etetteatea aacagagaag tgecaatete 1440 catgitgitg agcaccitaa ggaaggtaaa agccattcca ccaccaataa tcatcicatt 1500 gactttgtcc agcatattat tgatgagctg gatcttgtct gcaactttag ctccgcccag 1560 gatggccagg aagggtcgct ctgggctctc caaggccttt gcaaagtagt tcaqctcctt. 1620 cttcatcaaa aacccaccag ccttctgtgg cagattgact cctaccatgg agctgtgggc 1680 tctgtgagca gtgccaaaag catcattgac atagacatcc cctagcttgg aaagtgaagc 1740 teggaaaget tetattttgg etggetegge tttaacettg tteecagaag catettttee 1800 ettecettet teetecacat gaaageggag gttetecage aggatgacag acceaqeage 1860 tgggttggca caggctttct ccacttctgg gcctacacag tccttcaaga acagaacatc 1920 cttgcccagc agagatttga gttctacagc aactggctct aaggagtact tgtcaggcat 1980 gggcacacca tcaggccggc ctaggtggct cataaggact accgacttgg ctccattgtc 2040 caagcagaat ttgatgcttg ggacagcagc cttaatcctc tggttgtttg ttatctggtt 2100 gttetteata ggaacattga agtegaetet cataaegaee egetteeett taaegteeag 2160 cttgtccagc gtcagcttgt tagaaagcga cattttggaa atacagctgg ggagagaggt

```
cggtgattcg gtcaacgagg gagccgactg ccgacgtgcg ctccggaggc ttgcagaatg 2280 cggaacaccg cgcgggccct cgtgccaagc ttggcgtgtc natgtcagan ggctatcaat 2340 nagggtttca attggggacg tcc 2363
```

```
<210> 5846
<211> 3182
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1123)...(2418)
<223> similar to gi5305335 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5846 cacgtttctg tatgtcttag gccagtatcc caaacctctt ccacgtcact gttctttcca 60 cccattetee etttgeatet tgageagtta tecaaetagg atetgeeaag tggataetgg 120 ggtgccactc ccctgagaaa agactgagcc aggaactaca agctcccccc acattcctcc 180 cagectecet cactetecat getggeagag caggagggag actgaagtaa gagatggeag 240 agggagatgg tggcaaaaag gtttagatgc aggagaacag taagatggat ggttccgggc 300 cagagtcgat gtggggagga acagagggct gaagggagag ggggctgact gttccattct 360 agetttggea caaageagea gaaaggggga aaageeaata gaaattteet tagetteece 420 accatatgta ttttctagga tttgagagga aagagaggaa aatgggggaa tgggttgcaa 480 aatagaaatg agcttaatcc aggccgcaga gccagggaag gtgagtaact ttaggagggt 540 gctagacttt agaagccaga taggaagaat cagtctaaac tggccatgct ttggaaggga 600 caagactatg tgctccgctg cccaccttca gcctgcaatg agggactgag gcccacgagt 660 ctttccagct cttcctccat tctggccagt ccctgcatcc tccctggggt ggaggatgga 720 aggaaagetg ggacaagcag ggaacgcatg attcagggat getgtcacte ggcagecaga 780 ttccgaaact cccattctcc aatgacttcc tcaaccaatg ggtggccttg tgactgttct 840 ttaaggetga agatateeag gaaaggggge ttggacaetg gecaaggaga eceettegtg 900 ctgtggacac agetetette actetttget catggcatga cacageggag acegeeteca 960 acaacgaatt tggggctacg aagaggaata gcgaaaaaagc aaatctgttt caactgatgg 1020 gaaccetata getatagaac ttgggggeta teteetatge ceetggacag gacagttgge 1080 tggggacagg agaagtgctc aatcttcatg agacaaaggg gcccgatagg gccagcagcc 1140 acaaggeett gacetgeega gteageatge eccatetete tgeacagetg teccetaaae 1200 ccaactcacg tttctgtatg tcttaggcca gtatcccaaa cctcttccac gtcactgttc 1260 tttccaccca ttctcccttt gcatcttgag cagttatcca actaggatct gccaagtgga 1320 tactggggtg ccactcccct gagaaaagac tgagccagga actacaagct cccccacat 1380 tecteccage etggacetaa ttettgagag gggetetete tteaeggact gtgtetggac 1440 tttgagcagg cttctgcccc ttgcgttggc tctttgctgc cagccatcag gtgggggatt 1500 agageetggt gtaagtgege cagactette eggtttecaa agttegtgee tgegaaceea 1560 aacctgtgag tetettetge atgeaggagt tteteetggg cagetggtea eteeceagag 1620 aagctgggcc ttcatggaca catggaacta agcctcccaa atgggagttc tggctgagcc 1680 cagggtgggg agatcctggg aagggaggca ctggaggaag acggcacctc ttcccccatg 1740 gcagggtgtg agggaggcag gtttggaatg gtgcgagtat ggcaatctaa gcaggggtct 1800 ggtctctttg actccaggct ggcctttggc cgactgtctg ctcacccaga gaccttggac 1860 teeggactat ceatggetee gaatetaagt getgeeeact ceeatgetea cacceacaga 1920 aggicticce atccccttta gattcgtgcc tcactccacc agtgaggaag atgcctctqt 1980 ctttcccacg actgccagga gatagggaag cccagccagg actgaccctc cttcctccag 2040

```
cctgccctqa cccacctggc aaagcagggc acatggggag gaagagactg gaacctttct
                                                                     2100
ttgacageca ggeetagaca gacaggeetg gggacaetgg eeccatgagg ggaggaagge
                                                                     2160
aggegeacga ggtecaggga ggecetttte tgateatgee cettetetee caccecatet
                                                                     2220
ecceaceace acctetytyg cetecatygt acceecacy gyetygeete ecctagagyg
                                                                     2280
tgggcetcaa ccacetgete eegecacgca eeggttagtg agacaggget gecaeggcaa
                                                                     2340
ccgccaagcc cccctcaagg tgggacagta ccccggaccc atccactcac tcctgagagg
                                                                     2400
gctccggccc agaatgggaa cctcagagaa gagctctaag gagaagaaac cccatagcgt
                                                                     2460
cagagaggat atgtctggct tccaagagaa aggaggctcc gttttgcaaa gtggaggagg
                                                                     2520
gacgagggac aggggtttca ccagccagca acctgggcct tgtactgtct gtgtttttaa
                                                                     2580
aaccactaaa gtgcaagaat tacattgcac tgtttctcca ctttttattt tctcttaggc
                                                                     2640
ttttgtttct atttcaaaca tactttcttg gttttctaat ggagtatata gtttagtcat
                                                                     2700
ttcacagact ctggcctcct ctcctgaaat ccttttggat ggggaaaggg aaggtgggga
                                                                     2760
gggtccgagg ggaaggggac cccagcttcc ctgtgcccgc tcaccccact ccaccagtcc
                                                                     2820
ceggtegeca geeggagtet cetetetace geeactgtea cacegtagee cacatggata
                                                                     2880
gcacagttgt cagacaagat teetteagat teegagttge ctaceggttg ttttegttgt
                                                                     2940
tgttgttgtt gtttttcttt ttctttttt ttttgaaaac agcaataccc acagtacata
                                                                     3000
ttactgtagt tetetatagt ttaacataca tteataceat aactetgtte teteetett
                                                                     3060
tttgttttca actttaaaaa caaaaataaa cgatgataat ctttactggt gaaaaggatg
                                                                     3120
gaaaaataaa tcaacaaatg caaccagttt gtgagaaaaa aaaaaaaacc ccaaaaaaaa
                                                                     3180
                                                                     3182
```

```
<210> 5847
<211> 869
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (776)...(29)
<223> similar to gi5824504 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5847
tggttcaagc tgaggccgag tggggacgac gtggagctga ttggagaaga ggaagatgtg
                                                                       60
agtgtttacg acattgctga ccaccetgae tttaggttee gtacaactga categteate
                                                                      120
egeateggea ataetgagga tggggeteet cacaaggagg atgageeate ggtgggeeag
                                                                      180
gtggcccgtg tggacgtcag cagcaaggtg gaggtggtgt gggctgacaa ctcaaagacc
                                                                      240
atcatectge eccageactt gtacaacata gagtetgaga ttgaggagte agactacgat
                                                                      300
toggtagaag gcagcaccag cggggcatcc toggatgaat gggaagatga tagtgacagc
                                                                      360
tgggagacgg acaatgggct ggtggaggac gagcacccca agatagagga gccccccatc
                                                                      420
ccacccctgg agcagccggt ggcccctgag gacaagggag tggtgatcag tgaagaggca
                                                                      480
gccacagetg ccgtccaggg ggctgtggcc atggctgccc ccatggccgg gctgatggag
                                                                      540
aaggctggca aggacgggcc acccaagagc ttccgggagt tgaaagaggc catcaagatc
                                                                      600
ctggagagcc tcaagaacat gactgtggag cagctgctga cgggctcgcc cacctctccg
                                                                      660
actgtggagc ctgagaagcc aactcgggag aagaagtttc tggatgacat caagaagcta
                                                                      720
caggaaaacc tcaagaagac cctggacaat gtggccattg tagaggagga gaagatggaa
                                                                      780
gcagtgcccg acgtagagcg caaggaggac aagcccgagg ggcagtcacc tgtgaaggct
                                                                      840
gagtggccca gcgaaacccc ggtgctgtg
                                                                      869
```

```
<210> 5848
<211> 1766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1708)...(1264)
<223> similar to gi31973 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5848
ttcagtccaa tccagtgatc agagctgcat ttatcccgcc taagaaaatt catttctttt
                                                                       60
atgttgtcaa ttatagttag gtcggcatgt tagttgcatc agttgttttt tttttttta
                                                                      120
aaaaaaaac aateetttaa taaaattagt eeatetaaaa eteeceaatg eetaaggtte
                                                                      180
tagtcgtgga agggttagct gcagaattcc agttcagaag ccaacggagg ctcagtccag
                                                                      240
acagggatta accgacttgt gctggtatct aggtgcttgg attgccgagt tgagtttgct
                                                                      300
ggaagggaaa tggggcggcg tcggggggcc cgacaggcct ggctgccagt cggcttccgc
                                                                      360
gaaaacgact cttgctgtcc acatagccag ccgtgaagcc aaactgcagg cctctgccct
                                                                      420
cccctaaatg tcctcctagg aggcagtcac tcgggaggaa gatgtgcctg ttaccaagtg
                                                                      480
cttcgtcccg gccccagcgc agacctatga atgaagatgg agggagagct gatgtgaaag
                                                                      540
gcctgggtcc cggccgcaga aggggcgcca gaccgaaatc ggcgatcgcg tctctcccac
                                                                      600
caaagcetcc cggccagcgg ccgcgtctga aagtcctggg ctaagcacca cgccgggggg
                                                                      660
gtaccagaca coceggetge agetgeegag ggeeteacte acettgeagg geegeeggee
                                                                      720
tgcgtcggcg ctgggactgc gcacgctcgg ccctgcgtca gagcgaggaa gaaaaaggcc
                                                                      780
aagatettee agaaggtget geggeeteee egeaegeeeg ettgaggega etegggatgg
                                                                      840
ggcggcttga gtcacgaacg ccgaggcggg gcagggtgcg gcgccggcgc gcctgccccc
                                                                      900
eggeaggete ggggtettee gegecaegga ggteaceega agagegeege aageegeate
                                                                      960
cggaaggccc gaaccctacc ggaggggcgg acggcggaca gggcaaggcc ccgagcccga
                                                                     1020
cgcggcaggc ggtgcgggac gggagcggtg gcgggcgggg actcgagggc cgggcggcga
                                                                     1080
aggcgggcga ggggagggga ggggaagggg aagccgcggc cccgcttgcc ccggcagtct
                                                                     1140
gaageggete agetetttee atgaaggeeg gtggggeece tttaaaggge etttgtggtg
                                                                     1200
gcatggggag gcctggcggc cgggcgcgc ccgggccctc ttagtactcc ttgcggaagc
                                                                     1260
cttggttgcc ctttcttcgc cgccccgaag ggcgcctcgg ccccaacggt ggcgctagtc
                                                                     1320
tatettggge ageageaegg geeetggatg gttgggeagg gaegeeette eetgggeaat
                                                                     1380
tegtcaagge ageccaggaa gettttagag etceetegte gttgeggatt ggecagettg
                                                                     1440
caggtggctg ggggatgatt cgcgtcttct tgttggtgcc geggccgcat tgcccggccg
                                                                     1500
gctccaggag tctcagctgg tgaggtactc catgcactag ccgccaaggt agcagcatgg
                                                                     1560
cctgccggcg ccaacgcgct cggcgtagtg gcccttccgc agcagccggt gtacacggcc
                                                                     1620
cactgggaac tegaeggeeg gegegegaeg agegegaett ggeettggeg egggeettge
                                                                     1680
egecagtett geegeggeee gacatgetag egaggtagae eggtgaagea egaeggetea
                                                                     1740
aacactagaa cagacgccca ccgcag
                                                                     1766
```

```
<210> 5849
<211> 1647
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (377)...(1255)
<223> similar to gi190510 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5849
getteactga agtteteett ggteetgatt ettggeetee teecaccaga acgtgagete
                                                                       60
ettgtgggag geagtgeece teccaqeete etcectgtea cagactgtgt gggggeeace
                                                                      120
caggggctga atggaccagg gggtcagcag ggagagtgct aagtggtggc ggggggcctg
                                                                      180
tggcagaggc cttgtgacag tgagggttga gggctggtcc agagagatga tgtgatcccc
                                                                      240
aggagaagcc acaggggacc atgacatggg cgccaccagc ttccaggtga acgtggacct
                                                                      300
atogaaagoo agottoaggg caggacactg tootttotgg aggggatggo cocaccocac
                                                                      360
agacaaggca ggcccagaca actctacccc actgcctaga agtgcgggtc cccagagcca
                                                                      420
gggtagaccc cctgagtcag gagcccgggc acagaactga gcacctgcac tgcaggccca
                                                                      480
gggccgggtt ccctggagaa ggagaaagac tgaagccact gcctacctcc tgcccacaac
                                                                      540
agactgcagg cccatttggt gacacaggac aagcagcaca tgtgtcgaac actgccgagc
                                                                      600
ecgeaggeae geetgeatee cacageeaeg ageetgtgag geteaggeat gtgaeetgea
                                                                      660
ggagctggag gcgggcggga aggcaggtgg gggcctctcc ctggctggag cagggagctc
                                                                      720
caggagacet caggaeggee eccaeceggt gggtaaggae eetgttteee aatttgeece
                                                                      780
caaggeetaa tggacecace gggettaggg agteeteact cagaggagag gageecacee
                                                                      840
ctcccaggac acctggctga gccggaacag cagcgcaggg gagctgtgac agcagagagc
                                                                      900
agcaccaggt cacacaagca gccgccccgg aaggacacgg cccatggtga cagaggacaa
                                                                      960
geageatgeg tgtgteagae actggeetgg cetgtggaea egeeegegte eeacageeat
                                                                     1020
gaccetgega ggccaggaga gactgeteca gggcacatga cetgtggtag etggaagtgg
                                                                     1080
ggcagggagg cgcagccaca ctcctgctct ggtccgaggg agatctcagg aaaccgactg
ggaaatcacc ccccacaggg acccccaccc ctcccagcct cactgcgccc cgtcaggcca
                                                                     1200
ggcagetgcc ctcagggtct gccaaggtgg gggtcaaggg ccatgggggc aggtagctct
                                                                     1260
gcctgcaaag cccacaagca tgtcagatca cctgggctgc agacagacaa acacctgagc
                                                                     1320
tgttctgaat accttcaggt tcctggcctc gctgagcaag tgcagaaatt tttaccttca
                                                                     1380
aggatcaggg tttttctgtt tgtttgtttt ttaacacaca catatgtgaa caaagagtat
                                                                     1440
gcgtttgtac tggcagaaga agcgtctggt aagacaacca gcaagttaac aatggtcacc
                                                                     1500
tccagaaatg ggctgggtaa accaaagaat ttttttgttt ttgtttttt tqaqtcagqq
                                                                     1560
totagototg toaccoaggo tggaacgoac tggtgtgate acggotoact gcagoottga
                                                                     1620
cctccctggc tcaagcaatc ctcccag
                                                                     1647
```

```
<210> 5850
<211> 1544
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1108)...(209)
<223> similar to gi2660716 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5850
ttttttttt ttcccttcca catttcgtat taaatacctg aaatatatta atcttaaaaa
                                                                     60
acaatatega tacagtacte aatggataga ggcagtggag tgaacaagaa gcccagattg
                                                                    120
caaaatcgta ggtcataaaa aaactggagt gcgcgtgcgt caggttccag gcacgcgaga
                                                                    180
aaaagcaacg cgaaagcttt cagtctcgga ggaggttttc gggcttgggg tagccgaaga
                                                                    240
300
cgaaccagtc ctcctcccag ctgctgggcg gtcctgttcc cggtagctcg gggggaagcg
                                                                    360
                                                                    420
gagetgeeag gtecacetgg agtagetgea geagetgege ggegteeteg tecagagtet
                                                                    480
ccagcttccc cacgaagtcg tagtcgatct ggcacgggtg gcagaggcgg tacacctgcc
gecagtgete gttgaaggge gecagettet eegtgtgegg gtecageagg taetggatga
                                                                    540
                                                                    600
agttggcgaa ggacaccttg aggccagcgc ggaaggcctc gcgcgccgag gcgggcaggc
tggtgtggtt ggcgtacagc cgcagcatgg gcacggcgaa cttgcggtag aactcctcgt"
                                                                    660
tetecagete gaaettgetg eggaaggegg agateaggeg caegaagggg tegegeaega
                                                                    720
agaggaactt ggtgtacttc ttgagcttga cettcatgag gtggcgggag agcttcccgt,
                                                                    780
ageggegeea gaacttgttg aaggteaggt gegegetgge gttgtgeaeg tgetegegeg
                                                                    840
ggatgcgcag cgggtcgcgg tagggcgcac cgcggtgcag caggcttccg ctcagcacga
                                                                    900
teateaegeg etteeagttg gtgeaggeea cettgggeae gtageagtag atggeeeegt
                                                                    960
gccggtcgtc cacgatcagg tggctcagct ccgagttggg gatgtcgtcg aatgggcgct
                                                                   1020
cettggtggg gaaggecagg etggagttgg egeagaagee eegeageaeg eteeteeget
                                                                   1080
eegectgetg eeggeeetgg tetgggetge geegggegte gegeggggae eagtegtage
                                                                   1140
eteteaeget etecteeatg eteceeggeg eaggeggetg etecgtetee tttetgggaa
                                                                   1200
ggtcgctctg cttcacgcca gcactgagaa acttgtccag aaactcgtcg acatcggagt
                                                                   1260
eggeegtgag etecetgtee etgteeggee egggegtggg eageggegge eeegtgtgeg
                                                                   1320
gcctagagaa ggacgtgtgc aagtagaagt gcgcggcgcc tgcgctgtcc cagtacacga
                                                                   1380
tgatcagcag gatcatgaac accgacccca gcaccagcca cagccggaac agccgggcct
                                                                   1440
tggtcatect geceegggeg ggetgggeee teteegggee teteaettea getteetgea
                                                                   1500
gagccggggc atcctgctgg gaacctcgcg cccctcacct cgcg
                                                                   1544
```

```
<210> 5851
<211> 1598
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1599)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (160) ... (1117)
<223> similar to gi1334643 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
ggocgagete caagactgeg egeacetett cagecaegte etgeeggtea etetgeteea
                                                                      300
gggcctgcac caggaagccc cacagcccct ggctgcccag cctggcgctc agcccaggag
                                                                      360
aagagcatgt gacggatctg ctcatccaga tcatcccgga actcgtgccg gatgcgctgc
                                                                      420
accteceggt aggacacece caggtgeagg gecaeggetg gecagtecag acceagaege
                                                                      480
ccagccacac tcagcaggtt getetgegte agaaageegg teteggeate teecagatte
                                                                      540
aagggtgcca aggagaggcc agccccccgc cgtggcccct cggaccctcg aagtctcggc
                                                                      600
agettgätgg geagagtgge catecacagg gegtetgege cetteetetg eegggeagee
                                                                      660
teageeteet egggeaceeg cacaggeace gegeeacggt agaaggacae eteetteaca
                                                                      720
ttcttcaggt gcgagtagaa gacaaagcag attctgccct ccacacagtc agggcggtca
                                                                      780
geatecacgt egatgeegeg etegaaggee geaaagaact ettegeeete gaacatetee
                                                                      840
acceptateag agggeteggg geeeeggtae egeteeagea geegeegaag ggtggegtee
                                                                      900
ecettgttte ggggeaggea etgeageagg acetgeteag ggteeeggeg eegetgeaga
                                                                      960
gcgatgaggt tcacacggtg cagccgcagc cgctcccagg ccttccgagc caggcctccc
                                                                     1020
acacagtict tggtggtgta ccagagccag taccaggaga agtgtgtgac ctggaaqcqt
                                                                     1080
gcgtacaggt gggtgagctc caggaccacc tgagctgtga tgtcatccca ggtggctgca
                                                                     1140
ggaggggccc agtacaacag gtgcaggcgg gagcggtcca gactgaggcc tgtgatgcca
                                                                     1200
gagggcagag gcagctgcac ggtgaccggt tggaggaagc tggggggacc gctctgtgac
                                                                     1260
aggcacagca gggggctcac tgcagcctct ggttctccca ggagggcctg cagctctcgg
                                                                     1320
ccagccatgc gcaccacctg catggagact cgacgaggct cctcagtggc cccagggggg
                                                                     1380
aagatgactt tgaccccagg atgacccgag gagcacagca gtgtcccctc cggtggcacc
                                                                     1440
aggcaggcat tggacacagg gcgggaaacc acaaggaacc aggagaagtg gggcacctgg
                                                                     1500
cagtgagece agageegetg gggtgeetet teeteeaggt aggteteeag gteaeeceag
                                                                     1560
ctgttgtcga agtccnccgc gagggctatc atctcagt
                                                                     1598
```

```
<210> 5852
<211> 1040
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (820)...(40)
<223> similar to gi200549 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5852
ggaatteetg tgeteatgge etgeatgaeg etgetgeeca eetggttggg aggegeteec
                                                                       60
ecaggeeete eeggeeeega eateteeteg eeetgegget eetataacee eeacteeeag
                                                                      120
ggcctggtca cctttgccac ccagctcttc aacttgctct cgggtgaggg ttacctggaa
                                                                      180
tggtececte tettetatgg ettetaceeg eccegeceae geetggeggt cacetacetg
                                                                      240
tgctgggcct ttgccgttgg cctcatctgc ctcctgctca tcctgcatcg ctcggtgtct
                                                                      300
gggctgaage agacactgct ggcggagtcc gaggctctga ccagctacag ccaccgggtg
                                                                      360
ttctcggcct gggacttcgg tctctgcggg gacgtccacg tgcggctgcg ccagcgcatc
                                                                      420
atcttgtacg aattaaaggt ggagctggag gagacagtgg tgcggcgcca ggctgcggtg
                                                                      480
cggacgctgg gccagcaagc cagggtttgg ttggtgcggg tgctgctcaa cctgctggtg
                                                                      540
gtcgcgctcc tgggggcagc cttctatggc gtctactggg ctacggggtg caccgtggag
                                                                      600
ctgcaggaga tgccccttgt ccaggagttg ccactgctga agcttggggt gaattacctt
                                                                      660
ccgtccatct tcatcgctgg ggtcaatttt gtgctgccgc ccgtgttcaa gctcattgct
                                                                      720
ccactggagg gctacactcg gagtcgccag atcgttttta tcctgctcag gttccagcct
                                                                      780
cacggggatg gctgggaatg atgaagggtg ggggcggtca gagggatgtt ggcgctgaca
                                                                      840
```

```
ggtaagacac ggaaatcctg ctgataccga atccagggat tcaaatcctg actctgttgg 900 ccaggtgcag tggctcacac ctgtaatccc agcactttgg gaggccgagg ctgaggtcag 960 gagttcgaga ccagcctgac aaacatgatg aaaccccgtc tgtagtaaaa atacgaatat 1020 tagcccggcc gtagtggctt
```

```
<210> 5853
<211> 1086
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (862)...(497)
<223> similar to gi1911774 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5853
ttttttttt ttcaattaaa gatttgattt attcaagtat gtgaaaacat tctacaatgg
                                                                       60
aaactettat tagatgetge atgtaetgtg etatggaeca egeacataca gecatgetgt
                                                                      120
ttcagaagac ttgaaatgcc attgatagtt taaaaactct acacccgatg gagaatcgag
                                                                      180
gaagacaatt taatgtttca tetgaateca gaggtgeate aaattaaatg acageteeae
                                                                      240
ttggcaaata atagctgtta cttgatggta tccaagaaga aatggttggt gatggataaa
                                                                      300
ttcagaaatg cttccccaaa ggtgggtggt ttttaaaaaag tttcaggtca caacccttgc
                                                                      360
agaaaacact gatgcccaac acactgattc gcggtccagg aaacacgggt cttccaaqtt
                                                                      420
ccaaggggct ggggttcccc aacgatcaag ttcctgtgct gtaatcaaga gggtcctttg
                                                                      480
gactggatag ggagcacttg ggagctgtac accatcagtc ataatggatg gcagtgtaaa
                                                                      540
agatgateca aatgaceatg aacaaggeaa aagaggteat aaaceettee ttegtgaget
                                                                      600
cccacgtgcc accatattct tcctcatcaa tctgtaggta attgctgaag tagaggtaca
                                                                      660
ggacteetge attgateagg cagaateetg etatteecaa gaaceetegt aatggeaaaa
                                                                      720
ctccccaaat gacaccagg accacagcaa tgatctgtcg gaaccagtag atcacatcta
                                                                      780
aaaattcatc cttatcctcc caggeegegt cgctccgcag caccttactc cagaeggaga
                                                                      840
etttgaggge ceegttggee agetgegget gaggeggete eteetteëge egeeggege
                                                                      900
tcatcctccc gtcgcgccgc ccgggccggg cctggggcgc gcgggctgag ccaaagggta
                                                                      960
gtcggggtct agggtcgcag gtcacggcgc ggggcggctg caggctcagc ggcccggtcc
                                                                     1020
tgegggeget geggtteete acaacetgge caagetacee ggttgeegee ggetetacag
                                                                     1080
agcagg
                                                                     1086
```

```
<210> 5854
<211> 701
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (667)...(663)
<223> similar to gi1345536 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5854
qqaattcaag acgccaagat ggcgacgagt cagtatttcg acttcgcgca gggcggcggc
                                                                       60 '
ecgcagtaca gcaccetect ggaggaeggg actitiggtet ggitaticee egetgetgtg
                                                                      120
acagegeeca tgacageage tggteeceae tggeaceeag gaagtattta tecaatgaet
                                                                      180
caatgaatet geegeeggat egeeegggae tgettteaet ttetgteagt eeagaagtgg
                                                                      240
agaccactcc cccggccctt gcatctgggc ttccttgtgc cctgccttgg acagttggct
                                                                      300
                                                                      360
gcagtggaag tgacgctgtg actgccctgt gcccaagctt aagaggcctt gcctgcatct
gctccatctt atgggaccct gcctggtgaa ggacccaagg ctggcctgct ggaggaggag
                                                                      420
atataaggag aagagtcaca gtgccccatc caacaggtag ctgccctcca ggggcagaga
                                                                      480
ageceageca tggteaggag agecacecag etgaggecea cetecaceag gattgecace
                                                                      540
cagctgaacc ccacctcagc caggagagcc acccagctga gccccatctg gccaggagag
                                                                      600
ccatccagct gagccccacc tctgccagga ttgccaccca gctgagcccc gccttggcca
                                                                      660
                                                                      701
ggagagccac ccagctgagc cccgccttgg ccagaaaaag g
```

```
<210> 5855
<211> 427
<212> DNA
<213> Homo sapiens
```

<220>

<221> misc_feature

<222> (210)...(5)

<223> similar to gi3319905 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5855
ggatattggc ccctcactgc agctgccaac acttggtcag tcactctcag ccatagcact
                                                                       60
ttgttcactg acctgtgtca cagcactgag ctccaccctt ttctgagagt tattacagcc
                                                                      120
aaaaagtgtg ggetgaagat ggttggttte atgtttetgt attatgtate tttttgtatg
                                                                      180
gtaaacacta tattetgtac ttaaccagat ctatttttac cecagatggg gatattettt
                                                                      240
gtaaaaaatg aacataaagc ttttttaatg gaagagcact acacaggggg cgccgatcta
                                                                      300
gaggactect tgetggacce agttttacae gaggetgaga getgttactg cetgeettat
                                                                      360
atggagetga attatteeet ggetggggat actgggtaag gaacetttat tetgegtagt
                                                                      420
aacaaaa
                                                                      427
```

```
<210> 5856 <211> 829
```

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (619)...(191)
<223> similar to gil619936 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5856 actagagaga aaaacgtatc ataaatcctt atgttgccca ctttaacaat tgccaacata 60 tgaccataac aattaacaac atatgactaa tottatttca cotttaccta cotcoctcat 120 tagtttgaat cagattgcag ttattttatt tgtaaatatt tcagtattct gatattcagt 180 tgatcttttt tgtttatcct tctgccaggg ccatactatc ttgattactg gagggttata 240 ttaagtatag aaggcaggta ggttaaattc cccaattttt ttctcagcta ttcttggact 300 tttgcctaag tcaaatttaa aattettetg tcagttteta gaaagaagee ttetgggett 360 ttgatttctt tttcatttct tgtgaaacaa atatcagatg ggcttttgat tttgattgca 420 ttgaatctaa aggtcaattc tgggagaatt gacatccttg acaatagtct tttgatccat 480 gaatgtggtg tatctctccc tttatttagg tctttaggtt ctctcaatat tttctagttt 540 tragtatara aatrotgrar atrictitggt acatagattt ctaaatattt catgottttt 600 660 tttaagtagt gaattatett tttagaaaat taaaacatga gagaaaagge ettggtttt 720 tatattatgt taaaaatatt agttttgttt acacattett etggtgtget ttattgtetg 780 tagaaatgtt accetgeage etgggeaaaa tagtgagaaa etatetete 829

```
<210> 5857
<211> 1344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (777)...(103)
<223> similar to gi2648022 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5857
tttttttttg ccaggtgttt ttacatttta ttagctacag tatagatect agagctgcct
                                                                       60
cattecetee ceteceetee ceteceecea ceatggaggt caggeettge caggageece
                                                                      120
tgcctttgct gcctgggccc gctggaactc ctgctgcagc tgagcaaggg tctccctctg
                                                                      180
ttgctctgac tgccgctcaa gatcccgaag ctgggattcg tatcgcttac taaggagaga
                                                                      240
caagggagac aagcagaaag ggagaaatta gtaggactca ctatggagag tgctaaacgc
                                                                      300
aagaaagaga taggtggaaa acttgagatc caggggaggg agaagaaggg gggttaaaag
                                                                      360
ggaaggaaag ggttggagga actggaggac taggggccac tatggagagc tgttctgcaa
                                                                      420
tggttcaaca cctctactcc aatggttcac ttgcatcaca gggtgcagca cacggtggtg
                                                                      480
gaataaaaac tcacatttca gctgtgatat agtccagcct cttccctact gtggcccgag
                                                                      540
cetececag etectgiting actageaceg gacceagaag titaaagace acgitiggace
                                                                      600
catccagcag ggccagttcc tgatggaggg atgggacata tgtgatcaga accatggcta
                                                                      660
gtacaggtcc ctcctcgccc cacaaatccc agtccctcac ctctttcacg atattatttt
                                                                      720
ctgttagttg tgcttcaagt ttctgcctcc ccgacatgga tttacttaag tctggggatg
                                                                      780
agaggaaagg caatttagaa acatcaaatg tgccacctat ccccacaatc ctagtcaggt
                                                                      840
```

```
ggatatggat ctgaggaagc agaaaagggt gggggcagcg ggtgagtgaa cagggaagag
                                                                      900
                                                                      960
tactgagact gaggeggga agtetetgea egegagggee cagatgggge aacaaacett
atctcggtaa tggctttggg ttgtaagtgc attgggcgag accataccga ccctgttccc
                                                                     1020
                                                                     1080
ttaccettet gtagetgttg atatttetee actteteeet gtagettett etggateage
                                                                     1140
teegeeatgg eggggatgaa ageetaetgg gtgegagaea agggegetgg gteteaetet
                                                                     1200
ctggaaggta cctgagctcc cttttctgat ctggcctgcg gaaatgatag cactcttgag
aggtagecet gaggggeace geaaceteee eecegteeeg gatategaet eeaceetgte
                                                                     1260
cccaggagat ggtgggcgaa acgcaagacc ccaagcctct caaccgaaat cctaacctac
                                                                     1320
tcacgttctt ccttcagtag taat
                                                                     1344
```

```
<210> 5858
<211> 1522
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (162)...(760)
<223> similar to gi5824504 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<4.00> 5858
aaccccgccc cattatattt atcacccccc cccttcagcg gaatggggcc cccggccccc
                                                                       60
ccccacaca agttattctc taatttgtat ataaatttca cttttaagca ttttttttt
                                                                      120
ttttaagaaa taataataca ttttaatgca agagaaatca tagccctggt acacacccct
                                                                      180
teccegatet greetgeerg gggargrett targgreagt greececag gaerggragt
                                                                      240
caccingety teegggiese egecetacty geggeageat geetgieses ageattacat
                                                                      300
teaactgetg ctetggetet egagaggeeg getggeeteg ggeeteegge ttggegttet
                                                                      360
ttgctcccct gtctccctgc taaggccagc agggccaaac tgctaggcca ggtcagccag
                                                                      420
ggctggggga atgggctgta ccctgctcct ccccaggcac gactgtcccc ccggggctcc
                                                                      480
atcaccgggt ggggcggagc gtctgctggg gcagctctgt gggccacagg atcccccgc
                                                                      540
acceaetgea tetetetgee cagggtgeet geeteatagg atgeeeegeg ceaeagagte
                                                                      600
tetetgeeca gggegeeege eteacagetg gteetegtee acceagatgg tettgegetg
                                                                      660
dtectegeeg atettgteet tgacaaegeg gageagetee tetaegetge eccaeatgte
                                                                      720
aggttccacc gtggcgtaca ggcacggcag ggcctccagc tccttctcct tcagccggca
                                                                      780
cacgegeagg aactectect cegteteagg teggggeage agetttetga acetettqat
                                                                      840
gttettetea cacaccegga tgaagagcae gatggggtag atgttggaet tgatcaagte
                                                                      9.0,0
tettgtgeag eegateeeag eeteeageag geagtgettg ttettggegg eeacagette
                                                                      960
aatgitiggca ggggcgatgc attcgaacgc gttggggttc ttctctcggg agtagatgat
                                                                     1020
ggtctccgtc ttctgccttc tgaggaactc atctcttgtg acgatatctg acttgcagat
                                                                     1080
ggtgaactcc atggcacctc ccgagttgag cagcctctgc accagcgtct tggccagcac
                                                                     1140
ggtgggtgtg aagagcacgg gccggcggcg ctcgcagtag aaggcgcgta ccaggctgta
                                                                     1200
ggggatgagg ctgaggttet tgeccagete geteteaggg tecagetett cetgettete
                                                                     1260
agtcaagage tiggiggegi ceagegagga eegggeeagg eteeetageg gaeteeeega
                                                                     1320
gatgatgegg accegetegt tgetgtteat cegettatae ttgttetegg acctgetgae
                                                                     1380
gaactgaagg agetggeeaa aaaggaaget tgetegegag agaeggggge tgaeeegggg
                                                                     1440
gtegetigtt gaaagegett ettetggetg cagggtgtte eggagtgeee geagggtgtg
                                                                     1500
gtgggtgccg tctcctgcct cc
                                                                     1522
```

```
<210> 5859
<211> 6155
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (97)...(6017)
<223> similar to gi4808813 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5859
eccegggteg acceaegegt ccaaaagete cagaactgte teacteceag getacatett
ctcacttgct aacaaggacc tetgagttca geagecatga gttcagacte agaattggct
                                                                      120
gtttttgggg aggctgctcc tttcctccga aagtctgaaa gggagcgcat tgaggcccag
                                                                      180
aataggeeet ttgatgeeaa aacatetgte tttgtggegg ageedaaaga ateetttgte
                                                                      240
aaagggacca tccagagcag agaaggagga aaagtgacgg tgaagactga gggaggagcg
                                                                      300
actotgacag tgaaggatga teaggtotto occatgaaco otoccaaata tgacaagato
                                                                      360
gaggatatgg ccatgatgac tcatctgcat gagcctgctg tgctgtacaa cctcaaagaa
                                                                      420
cgttatgcag cctggatgat ctacacctat tcaggtctct tctgtgtcac tgtcaacccc
                                                                      480
tacaagtggc tgcctgtgta taagcccgag gtggtgacag cctaccgagg caaaaagcgc
                                                                      540
caggaggece egececacat ettetecate tetgacaacg cetateagtt catgetgact
                                                                      600
gaccgagaga atcagtcaat cctgatcact ggagaatctg gtgcagggaa gactgtgaac
                                                                      660
accaagegtg teatecagta etttgeaaca attgeagtta etggtgagaa gaagaaggaa
                                                                      720
gaaattactt ctggcaaaat acaggggact ctggaagatc aaatcatcag tgccaaccc
                                                                      780
ctactggagg cctttggcaa cgccaagacc gtgaggaatg acaactcctc tcgctttggt
                                                                      840
aaattcatca gaatccactt tggcactact ggaaaactgg catctgctga tattgaaaca
                                                                      900
tatctgctag agaagtctag agttgttttc cagcttaagg ctgagagaag ttatcatatt
                                                                      960
ttttaccaga ttacatcgaa taagaaacca gaacttattg aaatgettet gattaccacg
                                                                     1020
aacccatatg attacccatt tgtcagtcaa ggggagatca gtgtggccag catcgatgat
                                                                     1080
caggaagaac tgatggccac agatagtgct attgatattt tgggctttac taatgaagaa
                                                                     1140
aaggteteea tttacaaget eaeggggget gtgatgeatt atgggaacet aaaatttaag
                                                                     1200
caaaagcagc gtgaggagca agcagagcca gatggcacag aagttgctga caaggcggcc
                                                                     1260
tacctccaga gtctgaactc tgcagatctg ctcaaagctc tctgctaccc cagggtcaag
                                                                     1320
gteggeaatg agtatgteae caaaggeeag aetgtagaae aggtgteeaa egeagtaggt
                                                                     1380
getetggeca aageegteta egagaagatg tteetgtgga tggttgeeeg cateaaceag
                                                                     1440
cagetggaca ecaageagee caggeagtae tteategggg tettggacat tgetgggttt/
                                                                     1500
gagatttttg atttcaacag cctggagcag ctgtgcatca acttcaccaa tgagaaactg
                                                                     1560
caacagtttt tcaaccacca catgttcgtg ctggagcagg aggagtacaa gaaggaaggc
                                                                     1620
ategagtgga egtteatega ettegggatg gacetggetg eetgeatega geteategag
                                                                     1680
aageetatgg geatettete cateetggaa gaggagtgea tgtteeetaa ggeaacagae
                                                                     1740
acctecttea agaacaaget gtatgaccag cacetgggea agtetgecaa ettecagaag
                                                                     1800
cccaaggtgg tcaaaggcaa ggccgaggcc cacttcgctc tgattcacta tgctggtgtt
                                                                     1860
gtggactaca acattactgg ctggctggag aagaacaagg accccctgaa tgagaccgtg
                                                                     1920
gttggactgt accagaagte tgcaatgaaa actetagete agetettete tggggeteaa
                                                                     1980
actgctgaag gagagggagc tggtggaggg gccaagaaag gtggtaagaa gaagggctct
                                                                     2040
tetticcaga cagigicige cetticaga gagaatiiga acaageigat gaccaaceic
                                                                     2100
aggagtaccc atcctcactt tgtgaggtgt atcatcccca atgagacaaa aactcctggt
                                                                     2160
gccatggage atgagettgt cetecaceag etgaggtgta aeggtgtget ggaaggeate
                                                                     2220
cgcatctgta ggaaaggatt tccaagcaga atcctttatg cagacttcaa acagagatac
                                                                     2280
aaggtattaa atgcaagtgc aatccctgaa gggcaattca ttgatagcaa gaaggcctct
                                                                     2340
```

```
gagaagetee ttgcatecat egacattgae cacacecagt ataaatttgg geacaceaag
                                                                     2400
gtetttttea aagetggtet tetggggete etagaggaga tgegagatga caagetggee
                                                                     2460
cagetgatta ceegaaceea ggeeaggtge agagggttet tggeaagagt ggagtaceag
                                                                     2520
aggatggtgg agagaaggga ggccatcttc tgtatccagt acaatatcag atccttcatg
                                                                     2580
aatgtcaagc actggccctg gatgaaactc ttcttcaaga tcaagcctct gttgaagagt
                                                                     2640
                                                                     2700
gcagaaactg agaaggagat ggccaccatg aaggaagaat ttcagaaaat taaagacgaa
cttgccaagt cagaggcaaa aaggaaggaa ctggaagaaa agatggtgac gctgttgaaa
                                                                     2760
gaaaaaaatg acttgcagct ccaagttcag gctgaagccg aaggcttggc tgatgcagag
                                                                     2820
gaaaggtgtg accagctaat caaaaccaaa atccagctag aagccaaaat caaagaggtg
                                                                     2880
actgagagag ctgaggatga ggaagagatc aatgctgagc tgacagccaa gaagaggaaa
                                                                     2940
ctggaggatg aatgttcaga actcaagaaa gacattgatg accttgagct gacactggcc
                                                                     3000
aaggttgaga aggagaaaca tgccacagaa aacaaggtga aaaacctcac agaagagatg
                                                                     3060
gcaggtctgg atgaaaccat tgctaagctg accaaggaga agaaggctct ccaggaggcc
                                                                     3120
caccagcaga ccctggatga cctgcaggca gaggaggaca aagtcaacac cctgaccaaa
                                                                     3180
gctaaaatca aacttgaaca acaagtggat gatcttgaag ggtccttgga gcaagaaaag
                                                                     3240
aaacttegea tggacetaga aagggetaag aggaaacttg agggtgactt gaagttggee
                                                                     3300
caagaatcca taatggacat tgaaaatgag aaacagcaac ttgatgaaaa gctcaaaaag
                                                                     3360
aaagagtttg aaatcagcaa tctgcaaagc aagattgaag atgaacaggc acttggcatt
                                                                     3420
caattgcaga agaaaattaa agaattgcaa gcccgcattg aggagctgga ggaggaaatc
                                                                     3480
gaggeagage gggeeteeeg ggeaaaaege agagaageag egetetgaee teteeeggga
                                                                     3540
gctggaggag atcagcgaga ggctggaaga agccggtggg gccacttcag cccagattga
                                                                     3600
gatgaacaag aagcgggagg ctgagttcca gaaaatgcgc agggacctgg aggagggcca
                                                                     3660
eccetacagg cattgaagee acageggeea ceetgaggaa gaageatgea gatagtgtgg
                                                                     3720
ccgagcttgg ggagcagatt gacaacctgc agcgagtgaa gcagaagctg gagaaggaga
                                                                     3780
agagtgagat gaagatggag attgatgacc ttgctagtaa tgtagaaacg gtctccaaag
                                                                     3840
ccaagggaaa cctagagaaa atgtgccgga ctctagagga ccaactgagt gaactgaaat
                                                                     3900
caaaggaaga ggagcagcag cggctgatca atgacctgac tgcgcagagg gggcgcctgc
                                                                     3960
agactgaatc tggtgagttt tcacgccagc ttgatgaaaa ggaagctctg gtgtctcagt
                                                                     4020
tatcaagagg caaacaagcc tttactcaac agattgaaga attaaagagg caacttgaag
                                                                     4080
aggagataaa agccaagaac gccctggcgc atgccctgca gtcttcccgc cacgactgtg
                                                                     4140
acctgctgcg ggaacagtat gaggaggagc aggaatccaa ggccgagctg cagagagcac
                                                                     4200
tgtccaaggc caacaccgag gttgcccaat ggaggaccaa atacgagacg gacgccatcc
                                                                     4260
agegeacaga ggagetggag gaggeeaaga agaagetgge eeageggetg caggeagetg
                                                                     4320
aggaacatgt agaagetgtg aacgecaaat gtgetteeet egaaaagaeg aageagegge
                                                                     4380
tgcagaatga ggtcgaggac ctcatgcttg atgtggagag gacaaatgcc gcctgtgccg
                                                                     4440
ecettgacaa aaagcaaagg aacttegata agateetgge agaatggaaa cagaaatgtg
                                                                     4500
aggaaacgca tgctgagctt gaggcctccc agaaggaggc ccgttccctt ggcactgagc
                                                                     4560
tgttcaagat aaagaatgcc tatgaggaat ctttggatca gctagaaacc ctgaagcgag
                                                                     4620
agaacaaaaa cttacagcag gagatttctg acctcacgga acagattgca gaaggaggga
                                                                     4680
aaccgtatcc atgaactgga taaaataaag aaacaagtgg aacaagaaaa gtgtgaactt
                                                                     4740
caggetgett ttagaagaag cagaggeate tettgaacat gaagagggaa agateetgeg
                                                                     4800
catccagctt gagttgaacc aagttcaagt ctgaggttga taggaaaatt gcctgaaaaa
                                                                     4860
gatgaggaaa ttgaccagat gaagagaaac cacagttaga atcgtgggag tccatgccag
                                                                     4920
agcaccgcct ggaatgcctg agatcaggag taggaatgat gccattaagc tccaagaaag
                                                                     4980
aagattggaa gggagacctc aatgaaatgg aaattccagc ttgaaccatg cccaaccgca
                                                                     5040
tggcttgctt gaggcccctg aaggaactac aaggaacacc ccaaggcatc cctcaaggat
                                                                     5100
accccagatt ccaccctgga ttgattgctc tccgggagcc aagggaggac cttgaaagga
                                                                     5160
acagetggcc atggtggage geagageeaa cetgetgeag gettgagate gaggagettg
                                                                     5220
cggggccact ctggaacaga caagagagga gcagaaaaat tcgcagaaca aggaagctcc
                                                                     5280
tgggatgcca gtgagcgtgt ttcagctact tgcacaccca gaacaccagc cctgatcaac
                                                                     5340
accaagaaga agcttggaag acagatattt cccaaatgca aggagagatt ggaaggacat
                                                                     5400
tetecaagga agecegeaat tgeagaagaa aaaggeeaag aaggeaetea etgattgeeg
                                                                     5460
ccatgatggc tgaggagctt gaagaaggag caggacacca gcgcccaacc atggagcgga
                                                                     5520
ttgaagaaga acattggagc agaccgttga aggatcttgc agcttccgtc ttggattgag
                                                                     5580
gettgageca geetggeeet tgaagggtgg gaaagaagea gateecagaa aettggagge
                                                                     5640
ccagggtacg ggaagcttgg aaggaagaag gtttgagaat tgagccaaaa gcgttaatgc
                                                                     5700
ttaaggettg tecaaaggte ttgegeeaac attgagagge egagttgaag gaacteactt
                                                                     5760
```

```
taccagaccg gaaggaagat agaaagaata ttctcaggct tcaagatttg gtagataaac 5820 ttcaggcaaa agtgaaatct tataagagac aagctgagga ggctgaggaa caatccaaca 5880 ccaatctagc taaattccgc aagctccagc atgagctgga ggaggccgag gaacgggctg 5940 acattgctga gtcccaggtg aacaaactgc gggtgaagag ccgggaggtt cacacaaaaag 6000 tcataaagtga agagtgatca tgtcctgatg ccatggaatg actgaagaca ggcacaaaat 6060 gtgacatctt tggtcatttc cctctgtaat tattgtgtat tctaccctgt tgcaaaggaa 6120 ataaagcata gggtagtttg caaacaaaaa aaaaa 6155
```

```
<210> 5860
<211> 1447
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1448)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (498)...(887)
<223> similar to gi219671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5860 tagtagagge ggggtttcac catgttggce aggetgagte ttgegcaegg gaceteaaga 60 gatatgeetg ceteageete ecaaagtget gggattacag gegtgagtae teegtgeeca 120 gtcaattttt gtattttag tagagacggg gtttcaccat gttggtcagg ctggtctcaa 180 acttetgace teatgatetg eccacetegg ceteccaaag tgetgggatt geaggegtaa 240 cacncegege ecaagetaat ttttaaaaat attttataga gacaggtete actatgttge 300 ccaggetegt cttgaacece tgggeccagg cgeteeteec acettgaeet eccaaaqtte 360 tggaattaca catgtgagcc aacacaccag gcccagactg ggtaatttat aaagaaattt 420 acttetgece acaceggece geeteeege ggegagtgge tgaggegtag egetgeeate 480 ecegeacece tgggaacatg gegetgegag tggtgeggag egtgegggee gtgetetgea 540 gcctgcacgt ggtcctggca cctgccgcgc cctgcctatc gaggccctgg cagcttggga 600 tgggcgccgt ctggttactg taatctgcct gaagttggga caaaattgaa caaacaagat 660 gagtttggtg ctttggagag tgtgaaagct gctagtgaac tctattctcc tttatcagga 720 gaagtaaccg aaattaatga agctcttgca gaaaatccag gacttgtaaa caaatctcgt 780 tatgaagatg gttggctgat caagatgaca ctgagtaacc cttcataact agatgaactt 840 atgagtgaag aagcatatga gaaatacata aaatctattg aggagtgaaa atggaaccac 900 taaataagct agtatgaaat aacgcaaccc agcagagttg tcctaaatta gtggtggata 960 gaagacttag aatagcaact tttagcatta cccatgggaa aaaaaaacta ctgttaacac 1020 tgctaatgaa agaagatgcc ttttaacttt ctaatgattg tagataaaca taatatgtgt 1080 ctttttcaca acatcctatg atttttagac taggctctag tattcatgaa attatccatg 1140 aaattatcca tggtaaaaat tagttacaaa aattacataa ttcaaagata atgttgttat 1200 tettaageet tatataatat tgtaaettgt gtatgteeat aeetggattt gggatgaaat 1260 acttaatgat ctttccattg gaaataactg ggagtgaaga agtttttgtt gcttgtacag 1320 tgtcagatga agaacaacac tatcttaatt ttgcaataca ctgcatttgc tggtgctgtt 1380 tttatatagt gaagcaacag ctgtacagca aaataataaa atactcactt cttcgttaaa 1440 1447

```
<210> 5861
<211> 1498
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (245)...(1285)
<223> similar to gil088448 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5861
tttcgtcaca taggcacaca gagatacgcg cacacacaca cacaaacgca ctcagatttc
                                                                       60
ceggaccetg gttttectec tgtgaccett teggggeegg geteteacec taaagaagea
                                                                      120
geocegeect ggggtggeec caecetetet tgggaectgt cataagtegg acceegggeg
                                                                      180
eceggetgeg cagteceage egeetteece aggeagtgga acetteggge teetgagett
                                                                      240
caggatggtt cgtactaaga catggaccct gaagaagcac tttgttggct atcctactaa
                                                                      300
tagtgacttt gagttgaaga catctgaget eccaecetta aaaaatggag aggteetget
                                                                      360
tgaagetttg tteetcaceg tggateecta catgagagtg geagecaaaa gattgaagga
                                                                      420
aggtgataca atgatggggc agcaagtggc caaagttgtg gaaagtaaaa atgtagccct
                                                                      480
accaaaagga actattgtac tggcttctcc aggctggaca acgcactcca tttctqatqq
                                                                      540
gaaagatctg gaaaagctgc tgacagagtg gccagacaca ataccactgt ctttggctct
                                                                      600
ggggacagtt ggcatgccag gcctgactgc ctactttggc ctacttgaaa tctgtggtgt
                                                                      660
gaagggtgga gaaacagtga tggttaatgc agcagctgga gctgtgggct cagtcgtggg
                                                                      720
gcagattgca aagctcaagg gctgcaaagt tgttggagca gtagggtctg atgaaaaggt
                                                                      780
tgcctacctt caaaagcttg gatttgatgt cgtctttaac tacaagacgg tagagtcttt
                                                                      840
ggaagaaacc ttgaagaaag cgtctcctga tggttatgat tgttattttg ataatgtagg
                                                                      900
tggagagttt tcaaacactg ttatcggcca gatgaagaaa tttggaagga ttgccatatg
                                                                      960
tggagccatc tctacatata acagaaccgg cccacttccc ccaggcccac ccccagagat
                                                                     1020
tggtatctat caggagette geatggaage ttttgtegte taeegetgge aaggagatge
                                                                     1080
ccgccaaaaa gctctgaagg acttgctgaa atgggtctta gagcttccct actttgtaat
                                                                     1140
tgactgactt caagcaaata ctcttgtcta taaatccatg aagagtgcta agccatcact
                                                                     1200
ggaatacatt agcgaaaaac ttgtatcagg gtaaaatcca gtacaaggaa tatatcattg
                                                                     1260
aaggatttga aaacatgcca gctgcattta tgggaatgct gaaaggagat aatttgggga
                                                                     1320
agacaatagt gaaagcatga aaaagaggac acatggaatc tggaggccat ttagatgatt
                                                                     1380
agttaatttg tttttcacca tttagcaaaa atgtatacta ccttaaatgt cttaagaaat
                                                                     1440
agtactcata atgagtttga gctacttaat aaaatacatt taagtggtaa aaaaaaaa
                                                                     1498
```

```
<210> 5862
<211> 1188
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1136)...(372) <223> similar to gi1813880 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5862
ttgagcccca agaggcagag gttgccgtga gccaagatca cgccactgca ctccagccag
                                                                       60
ggtggcagag cgaaaccttg tctcaaaaca acaacaaaaa agaagtaaac agctggtaaa
                                                                      120
gcaacctagc ctaaaactta caaagtagca gagtgaacac atatgtgcat gcacacacac
                                                                      180
acacacacaa cacacataca cacagatgag agtagcacac acgccaaaga tacatcaagc
                                                                      240
aagtgetttt ttaateaata cateaaatga tatttttget ageetgagga agettetett
                                                                      300
tgcctgtcct atcattccca cccattgcct cacagggatg gaaagaaatt ccttcttgga
                                                                      360
cccaacatta gataaacata accaagtett tacatgtgge tttggagaag getgetagga
                                                                      420
tgettgegaa eaegacateg ggggtetggg atgeategat ggeggagtgg atececegtt
                                                                      480
teetgtagta ettetatgag tggggtgggt ttgagtgtgg gtagggettg caggegggat
                                                                      540
tttcaagggc ctttttcatt tatcatcttg atcgacggga tcaaggggtt ccccggttga
                                                                      600
ttgtcatctt ttcatggggg ctcttttggg aggggttgaa ctcctcgtgg gtagggaacg
                                                                      660
gecaetetti gggggtgaaa teagecaitt etgegtgeet cacagteega gggaagecat
                                                                      720
ccagaagaaa accatttttg cacaaggggg totocaaatt ottotcaatg agotocacta
                                                                      780
coatticate acteaceagt ticecageat ceatagitige citicagetti tittectaget
                                                                      840
ctgagccaga agccaccatg gccctcagca tgtccccagt agctaaatgg cagacacaga
                                                                      900
agtitticago caatotgggt gootggggca gtagatagca gcagaaagag caggagotti
                                                                      960
ggagtcattc agatgcaagc tctgtaaatt acttgctatg tagcctagag aacaagccat
                                                                     1020
tcaaacttca gtttctccaa ctgggtccct ttaccggccc cgggaggccc cagcagcacg
                                                                     1080
geceggatge etttaggata etegggttet geegetggea egetgggage eatgteegee
                                                                     1140
gaagtetete actgaacace agttegeacg ceteacaggt ecacgaaa
                                                                     1188
```

```
<210> 5863
<211> 2134
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (287)...(703)
<223> similar to gi1890141 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5863
ggaatteggg tgaggetete teattecaga tatggagaet aaaaagttea agatggaagt
                                                                       60
aatagcaaáá aaattacagt áctáátcaca acagctaccá titictcagca ttágacacag
                                                                      120
taactgtatg aaagaagtat gattattagg totgttttac agatgaggaa actgagacco
                                                                      180
agaaaggtgg aagcacttgt ctaaggtcac gcctccagga agcagtgtgt ccacgactcc
                                                                      240
agtocaagtg gtcaggctcc agagcccaca gtcccagggg tccatgatgc cgagctgcaa
                                                                      300
tegtteetge agetgeagee geggeeecag egtggaggat ggeaagtggt atggggteeg
                                                                      360
ctectacetg cacetettet atgaggactg tgeaggeact geteteageg acgaecetga
                                                                      420
gggaccteeg gteetgtgee eeegeeggee etggeeetea etgtgttgga agateageet
                                                                      480
gtcctcgggg accetgette tgattgctgg gtgtggcgge tetgaccaet ggctatgcag
                                                                      540
```

```
tgcccccaa gctggagggc atcggtgagg gtgagttcct ggtgttggat cagcgggcag
                                                                      600
cegactacaa ecaggeeetg ggeacetgte geetggeagg cacagegete tgtgtggeag
                                                                      660
                                                                      720
ctggagttet getegecate tgeetettet gggecatgat aggetggetg agecaggaca
                                                                      780
ccaaggcaga gcccttggac cccgaagccg acagccacgt ggaggtcttc ggggatgagc
                                                                      840
cagagcagca gttgtcaccc attttccgca atgccagtgg ccagtcatgg ttctcgccac
                                                                      900
cegecagece etttgggeaa tettetgtge agaetateca geecaagagg gaeteetgag
                                                                      960
ctgcccacat ggcctaagat gtgggtcctg gatccttccc ccttctcacc ataaccccct
ctcagtgttt ccccaacttc tcccttttag cagggtccct ttagagccca actccaggtc
                                                                     1020
aaatetggag etcaaateec agtgeteect ceecaggagt ggggeeccaa etettecaag
                                                                     1080
ataccagcat tecteaagte eteccaaaae ttectaceca caccetette ecaaggeeet
                                                                     1140
caggggcaga aaacatctcc ttcaacccgt ccccactcct tcctctgcat gaccttgggc
                                                                     1200
aaaccettge cettteaage cateagetee tgeetetetg ceatgaggge tttggateag
                                                                     1260
attectette tegecaggat gaggacaege aetgecetee atagacaeag atgaaggggt
                                                                     1320
gggggtcatt cagetegaat gggteecaga tgeteaettg geettteeet geaggatgag
                                                                     1380
tgaagacgtt tgcctctcac agtgtgtctt ctacctgcat tttggcatca gagcccccca
                                                                     1440
gcccacccac cacaggcaat tactagccct agttgatagg tgaggtgggt gaagaaggct
                                                                     1500
ggaggtgaca tgtccgaggt cacacaacaa agcagcatgc aggaactaga aacacatctt
                                                                     1560
cagectecte etgggecage tettgtgeta caggtgggge ggagecagee cetéacette
                                                                     1620
ctggttccct gagggtcctc agggtggagg acaggtttgg cccagaaaga ctagccagag
                                                                     1680
geetgatggt eecaggtgge tetggatata etttggatat ggatttaaat ggtetetaag
                                                                     1740
agccgggggt agggggcagg aaaagtgggt tgtctttgcc cctcaaagtc cacctaccta
                                                                     1800
gaaaccaage ccaeggtett ggeegtgace etgataataa atgggetete teagaggege
                                                                     1860
cageceetee etecceagee ggaggegtea tetetettet gtaceactag agggagetet
                                                                     1920
gatgcagetg gagagcageg etcaaggete tegedeetee eetceetaac eettacette
                                                                     1980
agtetécade ageetgaagg geetéctagg ggateeteag geggeeeeea ceagggeaca
                                                                     2040
ecetactgic citigigeete aegececete eteateetge acceetteea teccaeette
                                                                     2100
cctttcaata aacagctggg atggaaaaaa aaaa
                                                                     2134
```

```
<210> 5864
<211> 1936
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1818)...(107)
<223> similar to gi4884092 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5864
ttttttttt ttgctagttg tatataaaat ttaatctcac cgaatgtaca gttttcaaat
                                                                       60
ttcacgtgta tattaaggaa ctgatgcatc tgagcattgt caaacaaacg ggaagaagaa
                                                                      120
gttaaagggc agcetggcat tgatggetgg tggagetetg aageetgeet etgeaqqtqc
                                                                      180
agacacatec acaaaagtaa cegeagtgga aataagaate gteettteat tteetgagtt
                                                                      240
ggcctcagga aaggaggatg aaattagatt tgcagttaca ttgactattt tggcctgtgg
                                                                      300
attcagcagg gatccgtatt tagtccactt cacttctata accaaagecc ctgggagetg
                                                                      360
gcaggaatcc ttcctgttga atgactgggt gatgaagtgg atgggcaccc agtccagcat
                                                                      420
gtccctgggc cctgggaatt tccaaaaggg gccacgtaat ctgggaagcc ctggcccac
                                                                      480
agcaggetet teacettetg tgetacgage tgacacggga gagetecagt cagtettagt
                                                                      540
ttacagocag attgcatagt gtaaccaaat aatactgggg tooggaccoc ctccagtgct
                                                                      600
```

```
aagcagtett geteagttgt getatgaaga atagtaaget gteeatatet atttgtggte
                                                                      660
tgaataatcc cagacccctt atgaggctgg aatccagcag ctaatgggag ccccacgaca
                                                                      720
taaccagggt ttccactgag agggactggc tgggtatttt cctgaagaaa atgaatttca
                                                                      780
aacttttqct gcagtgggac cactacgctg ctaactgtcc ccagaacgaa tgagagatca
                                                                      840
getttggtga etteacetge atetgtgtat gtgaggetgt aetttacete aagaacaaca
                                                                      900
ttcacgcaaa ggctaaagtg tccagcgttg acgagagtcg gctgcagcac atcagtgtcc
                                                                      960
tcccgtcggg tgagcgtttt atttagagac tgaatgacga tggactgaac agtgataggg
                                                                     1020
accttttttc ttgaatcagg taccctcaga atttccgggc tgctgtaaaa agccatgctg
                                                                     1080
agggetteaa tttetteaca etgttetaaa tttattttte tggtgeactt aacageetgg
                                                                     1140
ttcaccagaa acgctgcagg gttattatca gtgcacagag atgatgtcag ggacgaagga
                                                                     1200
aatotoagaa acgaatotga agtotgoaga ggaacoccat actoatattt agcagcagta
                                                                     1260
ggaatatcca gtttggttgt gaaggaaaca tatgattcag cattcaatgt aaaaccatca
                                                                     1320
gatgttttca tcaatgtatc aaaattgttt tcatcaggta cttctggatt aataaaggat
                                                                     1380
aatgcaggtt tatagtttgt aatatgaatg cagaaaatag atggattaat ctggtcaaca
                                                                     1440
agttcaaata ctctttgagg tgggtttgct gtaaaattca atgaatagat gactgctttt
                                                                     1500
tgactacaaa actggctgtc gcccgtgaca actggaactg agcaggcaga aaagacactg
                                                                     1560
aaatccacgg agctgcagtc gggatcacag cagcagttga tgtcacactg tgctggggat
                                                                     1620
aagtcacaga cacagagaac agcaacgtcc gtgactgggg taggcctggg gccggaggag
                                                                     1680
ggccctggag ccctgggagt cccggggggc ctggtcgacg ggaaagttcc gaaggtggcc
                                                                     1740
agggetgeet eggtggagtt gaggeeetet gtegteaeeg eeggggtgge ateggtetgg
                                                                     1800
gegeteaegg aggeeeagea geeeaggage accaeeagga geggegggag acetegegge
                                                                     1860
ctcatctccc agggagtccc agcgaggccc gcgacatgga cagcgcgttg cccggcaacc
                                                                     1920
                                                                     1936
gcgacagcca ggcgcg
```

```
<210> 5865
<211> 2697
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (402)...(2303)
<223> similar to gi4886493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5865
caaggtgcgg cgggtagtgt actcattcga aggagaatac ccccaattca ctagacgagc
                                                                       60
ccctaattgg gggtgcggtg ccgggcgcgc tctttcctcc ccctttccac caqcactgcc
                                                                      120
ctcagttctg cttctagcca cgccctttcg cgttcacgtc cagcgccctg gcgggattga
                                                                      180
tttgaggacg actggactgc cattgcgcct qcqcaqqqaq cccaaqqcaa qaqccqctaq
                                                                      240
getgecetge eegaaggget caactgteag tgageetgeg eaggaggeea ataggetgee
                                                                      300
aatactcctt ggactccccg ccagggccct gctgtcagtg cgcctgcgcg cgggtccggc
                                                                      360
geogaggite tigactgetg tgeoggaege caggitgtage catquagega geogatteeg
                                                                      420
agragement caagegteer egitgegatg acagecegag aacceectea aacaceeett
                                                                      480
ccgcagaggc agactggtcc ccgggcctgg aactccatcc cgactacaag acatggggtc
                                                                      540
eggageaggt gtgeteette etcaggegeg gtggetttga agageeggtg etgetgaaga
                                                                      600
acatccgaga aaatgaaatc acaggcgcat tactgccttg tcttgatgag tctcgttttg
                                                                      660
aaaatcttgg agtaagttcc ttgggggaga ggaagaagct gcttagttat atccagcgat
                                                                      720
tggttcaaat ccacgttgat acaatgaagg taattaatga tcctatccat ggccacattg
                                                                      780
agetecacce tetectegte egaateattg atacacetea attteaacgt ettegataca
                                                                      840
```

```
tcaaacaqct gggaggtgqt tactatgttt ttccaggagc ttcacacaat cgatttgagc
                                                                      900
atagtctagg ggtggggtat ctagcaggat gtctagttca cgcactgggt gaaaaacaac
                                                                      960
cagagetgea gataagtgaa egagatgtte tetgtgttea gattgetgga etttgteatg
                                                                     1020
atcteggtea tgggceattt teteacatgt ttgatggaeg atttatteea ettgetegee
                                                                     1080
cggaggtgaa atggacgcat gaacaaggct cagttatgat gtttgagcac cttattaatt
                                                                     1140
ctaatggaat taageetgte atggaacaat atggteteat ceetgaagaa gatatttget
                                                                     1200
ttataaagga acaaattgta ggaccacttg aatcacctgt cgaagattca ttgtggccat
                                                                     1260
ataaagggcg tcctgaaaac aaaagcttcc tttatgagat agtatctaat aaaagaaatg
                                                                     1320
gcattgatgt ggacaaatgg gattattttg ccagggactg ccatcatctt ggaatccaaa
                                                                     1380
ataattttga ttacaagcgc tttattaagt ttgcccgtgt ctgtgaagta gacaatgagt
                                                                     1440
tgcgtatttg tgctagagat aaggaagttg gaaatctgta tgacatgttc cacactcgca
                                                                     1500
actictitaca cogtagagot tatcaacaca aagttggcaa cattattgat acaatgatta
                                                                     1560
cagatgettt ceteaaagea gatgaetaea tagagattae aggtgetgga ggaaaaaagt
                                                                     1620
atogoattto tacagoaatt gacgacatgg aagootatac taagotgaca gataacattt
                                                                     1680
ttctggagat tttatactct actgatccca aattgaaaga cgcacgagag attttaaaac
                                                                     1740
aaattgaata ccgtaatcta ttcaagtatg tgggtgagac gcagccaaca ggacaaataa
                                                                     1800
agattaaaag ggaggactat gaatctcttc caaaagaggt tgccagtgct aaacccaaag
                                                                     1860
tattgctaga cgtgaaactg aaggctgaag attttatagt ggatgttatc aacatggatt
                                                                     1920
atggaatgca agaaaagaat ccaattgatc atgttagctt ctattgtaag actgcccca
                                                                     1980
acagagcaat caggattact aaaaaccagg tttcacaact tctgccaaga gaaatttgca
                                                                     2040 -
gagcaggctg attcgagtat attgtaagaa ggtggacaga aagagtttgt atgccggcaa
                                                                     2100
gacaatattt tgttcagtgg gtgtgcagac aggaaatttc acccaagccg caggatgggc
                                                                     2160
gatgttatta gcccccaact ccataacacc ctcaaaaaaa gggatgggaa cgacagtacc
                                                                     2220
ttcagtccca aaatcccaac tcgcctcccg aggaggcttc ccaaaagcag agtcccagct
                                                                     2280
ttttaaagat gacccaatgt gaatgtetgt agtcagttgt ttacaaacte ceteteetge
                                                                     2340
acaattcatt tagaggcttc aatcataaaa ttctgcaaaa taatgacaac tcatgcttta
                                                                     2400
attitgtatt tigaatgtac acgcatgcig aagctaagta actittaatc aaagaaataa
                                                                     2460
gatggtatta gggcaaatct tactatacta tgaaaagcat taccttgcct atttttaata
                                                                     2520
ttattaaagc ctttctcctt caaaaaaaaa aaaaagggcg gggcgcttaa aagatccctc
                                                                     2580
aggggggcca aaataacccc gagacgccca gctgtaagct tttcccttat qagqqcctaa
ttataaacca aacttggacc cttttggaaa ggaccttaac ttcgggggag cacaaaa
                                                                     2697
```

```
<210> 5866
<211> 3464
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3465)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1430)...(3052)
<223> similar to gi4773880 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5866
atgcagtggt cagtgataat ggaatacttg aaagtaatcc cctcactcca ggaactagtg

```
ctcagctagc agaactaata gccctcactt gggcactaga attaggagaa gaaaaaaggg
                                                                     120
caaatatata tacagactet aaatatgett acctagteet ccatgeceat geageaatat
                                                                     180
                                                                     240
ggaaagaaag ggaattoota acttotgaga gaacacctat caaacatcag gaagccatta
ggaaattatt attggctgta cagaaaccta aagaggtggc agtcttacac tgccggggtc
                                                                     300
atcanaaagg aaaggaaagg gaaaatactt ttgcctgcaa ctatccaatg gaaattactt
                                                                     360
aaaacccttc atcaaacctt tcacttaggc atcgatagca cccatcaaat ggccaaatca
                                                                     420
ttatttactq qaccaggcct tttcaaaact atcaagcaaa tattcagggc ctqtqaattq
                                                                     480
tgccaaaaaa ataatcccct gcctcatcgc caagctcctt caggaaaaca aaaaacaggc
                                                                     540
cattaccctg aaaaaaactg gcaactgatt ttacccacaa gcccaaacct cagggatttc
                                                                     600
agtatetaet agtetgggta aataetttea egggttggge aaaggeette eestqtaqqa
                                                                     660
cagaaaaggc ccaagaggta ataaaggcac tagttcatga aataattccc agattcggac
                                                                     720
                                                                     780
ttccccgagg cttacagagt gacaatagcc ctgctttcca ggccacagta acccagggag
tateceagge gttaggtata egatateaet tacaetgege etgaaggeea eagteeteag
                                                                     840
ggaaggtcga gaaaatgaat gaaatactca aaggacatct aaaaaagcaa acccaggaaa
                                                                     900
cccacctcac atggcctgct ctgttgccta tagccttaaa aagaatctgc aactttcccc
                                                                     960
aaaaagcagg acttagccca tacgaaatgc tgtatggaag gcccttcata accaatgacc
                                                                    1020
ttgtgcttga cccaagacag ccaacttagt tgcagacatc acctccttag ccaaatatca
                                                                    1080
acaagttott aaaacattac aaggaaccta tooctgagaa gagggaaaag aactattoca
                                                                    1140
cccttgtgac atggtattag tcaagtccct tctctctaat tccccatccc taggatacat
                                                                    1200
1260
tggctggagt ggtcttggat acatcacact tgagtcaaat cctggatact gccaaaggaa
                                                                    1320
cctgaaaatc caggagacaa cgctagctat tcctgtgaac ctctagagga tttgcgcctg
                                                                    1380
ctcttcaaac aacaaccagg aggaaagtaa ctaaaatcat aaatccccca tggccctccc
                                                                    1440
ttatcatatt tttctcttta ctgttctttt accctctttc actctcactg cacccctcc
                                                                    1500
atgeegetgt atgaceagta geteeeetta eeaagagttt etatggagaa tgeagegtee
                                                                    1560
eggaaatatt gatgeeccat egtataggag tetttetaag ggaaceecca cetteactge
                                                                    1620
ccacacccat atgccccgca actgctatca ctctgccact ctttgcatgc atgcaaatac
                                                                    1680
teattattgg acaggaaaaa tgattaatee tagttgteet ggaggaettg gagteaetgt
                                                                    1740
ctgtcggact tacttcaccc aaactggtat gtctgatggg ggtggagttc aagatcaggc
                                                                    1800
aagagaaaaa catgtaaaag aagcaatctc ccaactgacc cggggacata gcacccctag
                                                                    1860
cccctacaaa ggactagttc tctcaaaact acatgaaacc ctccgtaccc atactcgcct
                                                                    1920
ggtaagceta tttaatacca ceetcaetgg getecatgag gteteggeec aaaaccetae
                                                                    1980
taactgttgg atatgcctcc ccctgaactt caggccatat gtttcaatcc ctgtacctga
                                                                    2040
acaatggaac aacttcagca cagaaataaa caccacttcc gttttagtag gacctcttgt
                                                                    2100
ttccaatctg gaaataaccc atacctcaaa cctcacctgt gtaaaattta gcaatactac
                                                                    2160
atacacaacc aacteccaat geateaggtg ggtaactect cecacacaaa tagtetgeet
                                                                    2220
acceteagga atattittitg tetgiggiae eteageetat egitgittiga atggetette
                                                                    2280
agaatçtatg tgetteetet eattettagt geceeetatg accatetaca etgaacaaga
                                                                    2340
tttatacagt tatgtcaata teetaaagee eeegcaacaa aagagtacee attetteett
                                                                    2400
ttgttattgg agcaggagta ctaggcggac taggtactgg cattggcggt attacaacct
                                                                    2460
ctactcagtt ctaccacaaa ctatctcaag aactaaatgg tgacatggaa caggtcgccc
                                                                    2520
gacteceetg gteacettge aagateaact taacteceta geageagtag teetteaaaa
                                                                    2580
tcgaagagct ttagacttgc taaccgctga aagaggggga acctgtttac ttttagggga
                                                                    2640
agaatgctgt tactatgtta atcaatccgg aatcgtcact gagaaagtta aagaaattcg
                                                                    2700
agatogaata caacgtagag cagaggagot togaaacact ggaccotggg gootcotcag
                                                                    2760
ccaatggatg ccctggattc tccccttctt aggacctcta gcagctataa tattgctact
                                                                    2820
cctctttgga ccctgtatct ttaacctcct tgttaacttt gtctcttcca gaatcgaagc
                                                                    2880
tgtaaaacta caaatggagc ccaagatgca gtccaagact aagatctacc gcagacccct
                                                                    2940
ggaccggcct gctagcccac gatctgatgt taatgacatc aaaggcaccc ctcctgagga
                                                                    3000
aatctcagct gcacaacctc tactacgccc caattcagca ggaagcagtt agagcggtcg
                                                                    3060
teggeeaace teeceaacag caettaggtt tteetgttga gatgggggae tgagagacag
                                                                    3120
gactagetgg attteettag getgacetaa gganteetta aageettage tggggaaggg
                                                                    3180
tggaccacat ccaccttttt aaaacacggg gggctttgca actttaggtt cacaccttga
                                                                    3240
ccaatcagag agctcactaa aatgcctaat taggcaaaga caggaggtaa agaaatagcc
                                                                    3300
aatcatctat tgcctgagag cacagcagga gggacaatga tegggatata aacccaagte
                                                                    3360
ttegaagegg caaeggeaae eccetttggg teeceteeet ttgtatggga getetgtttt
                                                                    3420
catgctattt cactctatta aatcttgcaa ctgcaaaaaa aaaa
                                                                    3464
```

```
<210> 5867
<211> 7104
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (90)...(5251)
<223> similar to gi4096591 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5867
tttcgtccgg gcttgaggtt gaattaagaa tagtcaggtg gtgagtggaa cgtctcttgg
ggtgtcggaa ttcaaaacgg acctggagga tgttgatctc caagaacatg ccctggcggc
                                                                      120
ggetgeaggg cattteette gggatgtatt eggetgaaga geteaagaaa ttaagtgtta
                                                                      180
aatecattae gaaceetega taeetggaca geetggggaa eeeateggea aaeggeetgt
                                                                      240
acgatttage tttgggeeet geagatteea aagaggtgtg etecacetge gtgeaggaet
                                                                      300
tragcaactg ttctgggcac ctgggccaca ttgagctccc actcacagtg tataaccetc
                                                                      360
teetettega taagetgtae etgetgette ggggetettg tttaaaetge cacatgetga
                                                                      420
ettgteeeeg ggeegtgatt eacetettae tetgeeaget gagggttetg gaagtegggg
                                                                      480
ecetacaage agtetaegag ettgagagaa ttetgageag gtttetggaa gaaaatgeeg
                                                                      540
atccctctgc ctctgaaatt cgggaggaat tagaacaata cacaactgaa attgtgcaga
                                                                      600
acaacctect ggggteceag ggegeacatg taaagaaegt gtgtgagage aagageaage
                                                                      660
                                                                      720
tcattgctct cttctggaag gcacatatga atgctaagcg ctgtccccac tgcaagaccg
ggegateegt tgteegaaag gaacacaaca gcaagttgae tateacattt ccagccatgg
                                                                      780
tgcacaggac agctggccag aaggactctg agcccctggg aattgaggaa gctcagatag
                                                                      840
gaaaacgagg atacttaaca cccaccagtg cccgcgaaca cctttctgcc ctgtggaaga
                                                                      900
atgaaggatt ctttctgaac tacctttttt cgggaatgga tgatgatggt atggaatcca
                                                                      960
gattcaatcc cagtgtgttc tttctagatt tcttggtggt gccgccctca aggtctcgcc
                                                                     1020
cagtcagtcg cctaggagac cagatgttta ctaatggcca gacggtgaac ttgcaggctg
                                                                     1080
tcatgaagga tgtagttctg attcgaaaac ttctggcatt gatggcccaa gaacagaagt-
                                                                     1140
tgccagagga agtggccaca cccactacag atgaggaaaa agactctttg attgctattg
                                                                     1200
acegateett tttgagtaca ettecaggee agteeeteat agacaaaett tacaacattt
                                                                     1260
ggattegeet teagageeae gteaatattg tgtttgatag egagatggae aaactaatga
                                                                     1320
tggacaagta cccaggcatt aggcagatcc tggagaagaa agaaggcctg ttccgaaaac
                                                                     1380
acatgatggg aaagcgagtg gactacgctg cgcgctcagt catctgccca gacatgtaca
                                                                     1440
teaacaceaa egaaattgga atteecatgg tgtttgecae aaaaetgaee taeceacage
                                                                     1500
cagttacccc atggaatgtt caggaactta ggcaagcggt catcaacggc cctaatgtgc
                                                                     1560
acceaggage etecatggte ateaatgagg aeggeageeg cacageeetg agegetgtgg
                                                                     1620
acatgaccca gegagaggee gtggeeaage agettetgae eecageeaeg ggggeaeeta
                                                                     1680
agececaggg gacaaaaatt gtgtgeegge atgtgaagaa tggggaeatt etgetaetga
                                                                     1740
acegacagee cacactgeae agaceeteca tecaggeeca cegtgeeege atcetgeetg
                                                                     1800
aagagaaagt getgeggete caetatgeea aetgeaagge etataatgee gaetttgatg
                                                                     1860
gagacgagat gaatgcccat ttcccccaga gtgagctggg ccgggccgag gcctacgtcc
                                                                     1920
tggcctgcac tgatcagcag taccttgttc ccaaggatgg ccaaccattg gcgggactga
                                                                     1980
tecaggatea catggtttea ggggeaagea tgactaeteg gggttgettt tteaeceggg
                                                                     2040
agcactatat ggagetggtg taccgaggac teaeggacaa agtggggege gtgaagetee
                                                                     2100
tttctccttc catcctgaag ccctttccgc tgtggacagg aaaacaggtt gtgtcaacgc
                                                                     2160
tgeteataaa tataateeea gaggaeeaca teeeactgaa ettatetgga aaggegaaaa
                                                                     2220
```

```
tcactgggaa agcctgggtg aaggaaactc ctcgatccgt tcctggcttt aaccctgact
                                                                     2280
cgatqtqcqa gtcccaggtg atcatcaggg aaggggagct gctctgcgga gtgctggaca
                                                                     2340
aggegeacta tgggagetee geetaeggee tggteeactg etgetatgag atetatggag
                                                                     2400
gegagaceag eggeaaggtt etaacetgee tggeéegeet etteacegee tacetgeage
                                                                     2460
tctacagagg cttcaccttg ggcgtggaag acattttggt gaagccaaag gcagatgtca
                                                                     2520
agaggcaacg tatcattgaa gaatccaccc actgcgggcc ccaggctgtc agggctgcat
                                                                     2580
taaacctgcc agaagccgca tcatatgatg aggtccgagg aaaatggcag gatgcccatc
                                                                     2640
tgggcaagga ccagagggat tttaacatga ttgatctgaa gttcaaggag gaagtgaacc
                                                                     2700
attacagcaa tgagattaac aaggcatgca tgccttttgg cctacacaga cagttcccag
                                                                     2760
agaacacget geagetgatg gtgeagtegg gageeaaagg tteaactgtg aacacgatge
                                                                     2820
agatetegtg cetgetggge cagattgaac tggaaggteg gageaceeeg etgatggegt
                                                                     2880
etggcaagte actgeeetge tttgageett atgagtteae eeccaggget ggtggetttg
                                                                     2940
teactggeag gtteeteace ggeateaaac eteetgagtt ettetteeae tgeatggeag
                                                                     3000
gacgagaggg cctggtggac actgctgtga aaaccagccg ctcaggctat ctccaaaggt
                                                                     3060
gcatcatcaa gcacctagag gggctggtcg tgcagtatga tctcacggtc cgtgacagtg
                                                                     3120
acggcagtgt ggtgcagttc ctgtatgggg aggatggcct ggacatcccc aagacacagt
                                                                     3180
                                                                     3240
tectgeagee caageagtte ceetteetgg ceageaacta egaggtgata atgaaateae
agcateteca tgaagtttta teeagageag ateecaaaaa agetetecae caetteagag
                                                                     3300
ctatcaaaaa atggcaaagc aagcaccca acaccetgct gagaagaggc gcettettga
                                                                     3360
gttattccca gaaaattcag gaagctgtga aagccctgaa acttgagagt gaaaaccgca
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atggccgcag ccctgggact caggagatgc tgaggatgtg gtatgagttg gatgaggaaa
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gccgaaggaa ataccagaag aaggcggccg cttgtcctga ccccagtctg tctgtctggc
                                                                     3540
giccigacat ctactitgca tcagigtcag aaacatitga aacaaaggit gatgactaca
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gtcaagagtg ggcagctcaa acagagaaga gttatgagaa atcagagctt tctctcgaca
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ggttgaggac cttgctgcag ctagaagtgg cagcgctcac tgtgtgagcc gggcgaggct
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                                                                     3780
ttccactttg caggcagagg cgagatgaac gtcaccctgg gcattccaag gttgcgggag
                                                                     3840
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                                                                     3900
accaagaaag ccctgaagag agtgaaaagc ctgaagaagc aactcaccag ggtgtgcttg
                                                                     3960
ggggaggtgt tgcagaaaat tgacgtccag gagtccttct gtatggaaga aaaacagaac
                                                                     4020
aaattccagg tgtaccagct gcggtttcag ttcctgccac atgcatatta ccagcaggag
                                                                     4080
aagtgcctga gacccgagga catcctgcgc ttcatggaaa caagattctt taaacttctg
                                                                     4140
atggaatcca tcaaaaagaa gaataataaa gcatcagctt tcaggaacgt aaacactcga
                                                                     4200
agagetacae agegggatet ggacaaeget ggggagttgg ggaggagteg gggagageag
                                                                     4260
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                                                                     4320
gatgeetetg atgeeaaacg caaggagaag caggaggagg aggttgatta tgagagtgag
                                                                     4380
gaagaggagg agagggaggg cgaggagaac gacgatgaag acatgcagga ggaacgaaat
                                                                     4440
ccccacaggg aaggtgctcg aaagacccaa gagcaagatg aagaggtggg cttaggcact
                                                                     4500
gaggaggace egtecettee egeceteetg aegeageece ggaaacecae ceacagecag
                                                                     4560
gagccccagg ggcccgaggc catggagcgc cgggtccagg ctgtgcgtga gatccacccg
                                                                     4620
ttcatagatg actaccagta cgacaccgag gagagcctgt ggtgccaggt gacagtgaag
                                                                     4680
ctccctctga tgaagatcaa ctttgacatg agctccctgg tagtatcttt ggcccatggt
                                                                     4740
gccgtcatct atgcgaccaa gggcatcact cggtgcctcc tgaatgaaac aaccaacaat
                                                                     4800
aagaacgaga aggagettgt getaaacaca gaaggaatca aceteecaga getatteaag
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tatgcagagg teetggatet gegeegeete taetecaaeg acatecaege catagceaae
                                                                     4920
acgtatggca ttgaggccgc gctgcgggtg atcgagaagg agatcaagga tgtgtttgcc
                                                                     4980
gtgtatggca tegeggtega ecetegeeat eteteeetgg ttgetgatta tatgtgette
                                                                     5040
gagggtgttt acaagccact gaatcgcttt gggatccggt caaactcttc cccgctacag
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cagatgacat ttgaaaccag cttccagttt ctgaagcaag ccaccatgct gggatcccac
                                                                     5160
gatgagetga ggteteette tgeetgeett gtggteggga aggtegteag gggegggaea
                                                                     5220
ggcctgttcg agctcaagca gcctctgaga tagcagctac cccggcacca tctgcccagc
                                                                     5280
tecaaggace ettggtgagg gegtggeeea geetgeette tgeatgagag gaeeaggaga
                                                                     5340
ctggaatcca gggcagttcc aagtgacagt acagagcaca gcagcgacct tgggcctgaa
                                                                     5400
agcagtgggc ctctgagctg ggccagcttc acctggaaag tgacagagtt gctcatcctt
                                                                     5460
geceeteet gtetetggat ttttateaag gtttaceaag tettetgagt eeceetgaga
                                                                     5520
tggctggggc ctcacctgtg ctgcaggagg cctctgtggc ataaccccta aggagaagtc
                                                                     5580
ctgattcacg attcactgag aagaccaagg ggaagccatg ctttgctgct ggggacccca
                                                                     5640
```

```
ggcacctcca gagtagggaa gcggggttct tttgctgtga gtggccaggg acaacagaca
                                                                     5700
agattcctgg gggctcccga tgagcaggaa cgtggagcct gctgcccaag gcctgctcct
                                                                     5760
teeggetget ceageceetg ggggeagagt ceacaaagag teeceateaa gaettettee
                                                                     5820
ctgagtcaag tacagcgtag catagtcctc cacccaccca acctetetgc ctggccaggg
                                                                     5880
                                                                     5940
tectggeeet gecactgtgt ggegaggtgt cettetagae cacateagee ecaaggetgg
gagcagtege tecagggeeg cagcagttea eteceacaea tagaaceeag gteactgetg
                                                                     6000
                                                                     6060
gggcgattga acaggttgcc tggcttttct ctgctgtcag tttggtgtgg aggcctatgt
                                                                     6120
tetgececat acaceceaca ggecetgett atgggaagga acacaggeet ecageceaga
ggactgtgcc gccctgttct tggccgtcca cgtttcctct ccctctagca ccagcaatac
                                                                     6180
                                                                     6240
atttccctgg catggacaga aaagacagag aggacttata caaaggtttt gtaaaaccag
aggetagett ctatetttgt ctactgttat tteageteag ggegggtaat taacateatt
                                                                     6300
ggaactagct attaggaaag aaaaaaaact tggttttttt tacaacaatt ttttcccttg
                                                                     6360
                                                                     6420
gtttgcagtt tctgcatttg gatttgagaa cccagggcgg ggattttctt ggcacagtca
                                                                     6480
ggtcttgggt ccctcttcct gtgctttctt gtctgaggcc ttagggggaa gagctcagcc
tetgcageet cetecacete tgeceetgge etgeetetge tgtgaeetee ttecagaget
                                                                     6540
agctgctggc cctgtggcca ggagaagcag aggggagaag cctttatgca gaagctgtgc
                                                                     6600
tagccttggt ctggggtggg gaggctgctg ctgtgacctt aggggtaggg ttggggatca
                                                                     6660
                                                                     6720
agggaggett tgtcaaggga gagtgaccat gttgctccct acatccatgc aataggaccc
agectgeace tectaggeet acactgggga aagectgaca gaaatcagta cetectaacg
                                                                     6780
gggtetgeca ggttcaccaa ggcatgggca cagaggaata tgacagtttt gaggcaggca
                                                                     6840
ggaagggccc agcctgcagg gtaagacatt cattetttga gttaaaggcc atattcactt
                                                                     6900
gatgatttct acacacacta gaattgtgag agtgtccttg aaggagatca caaagtaacc
                                                                     6960
tggtgactgt ggcacagggt ccgtggattc catctctccc aggcactgag ggcgcagagg
                                                                     7020
                                                                     7080
cgaaggagca agccctgcat attggcaggg ctgtgaccat cgcacttaga tcagacccc
                                                                     7104
gacctgtgtt gggatgtgag ggag
```

```
<210> 5868
<211> 5127
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (331)...(4654)
<223> similar to gi31958 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5868
tttegtggeg gegtegggta egegeaeaeg ttgeatette tteetitege ggggteetee
                                                                       60
gtagttctgg cacgagccag gcgtactgac aggtggacca gcggactggt ggagatggcg
                                                                      120
acgetetete tgacegtgaa tteaggagae ceteegetag gagetttget ggeagtagaa
                                                                      180
cacgtgaaag acgatgtcag catttccgtt gaagaaggga aagagaatat tcttcatgtt
                                                                      240
tetgaaaatg tgatatteae agatgtgaat tetataette getaettgge tagagttgea
                                                                      300
actacagetg ggttatatgg etetaatetg atggaacata etgagattga teaetggttg
                                                                      360
gagttcagtg ctacaaaatt atcttcatgt gattccttta cttctacaat taatgaactc
                                                                      420
aatcattgcc tgtctctgag aacatactta gttggaaact ccttgagttt agcagattta
                                                                      480
tgtgtttggg ccaccctaaa aggaaatgct gcctggcaag aacagttgaa acagaagaaa
                                                                      540
gctccagttc atgtaaaacg ttggtttggc tttcttgaag cccagcaggc cttccagtca
                                                                      600
gtaggtacca agtgggatgt ttcaacaacc aaagctcgag tggcacctga gaaaaagcaa
                                                                      660
gatgttggga aatttgttga gcttccaggt gcggagatgg gaaaggttac cgtcagattt
                                                                      720
```

cctccagagg ccagtggtta cttacacatt gggcatgcaa aagctgctct tctgaaccaq 780 cactaccagg ttaactttaa agggaaactg atcatgagat ttgatgacac aaatcctgaa 840 aaagaaaagg aagattttga gaaggttatc ttggaagatg ttgcaatgtt gcatatcaaa 900 ccagatcaat ttacttatac ttcggatcat tttgaaacta taatgaagta tgcagagaag 960 ctaattcaag aagggaaggc ttatgtggat gatactcctg gtgaacagat caaagcagaa 1020 cgtgagcaga ggatagaatc taaacataga aaaaacccta ttgagaagaa tctacaaatg 1080 tqqqaaqaaa tqaaaaaagg gagccagttt ggtcactcct gttgtttgcg agcaaaaatt 1140 1200 gacatgagta gtaacaatgg atgcatgaga gatccaaccc tttatcgctg caaaattcaa ccacatccaa gaactggaaa ttaataccaa tgttttatcc aacatatgat tttgcctgcc 1260 ccatagttga cagcatcgaa ggtgttacac atgccctgag aacaacagaa taccatgaca 1320 1380 gagatgagca gttttactgg attattgaag ctttaggcat aagaaaacca tatatttggg aatatagteg getaaatete aacaacacag tgetatecaa aagaaaacte acatggtttg 1440 tcaatgaagg actagtagat ggatgggatg acccaagatt tcctacggtt cgtggtgtac 1500 1560 tgagaagagg gatgacagtt gaaggactga aacagtttat tgctgctcag ggctcctcac gttcagtcgt gaacatggag tgggacaàaa tctgggcgtt taacaaaaag gttattgacc 1620 cagtggctcc acgatatgtt gcattactga agaaagaagt gatcccagtg aatgtacctg 1680 aagctcagga ggagatgaaa gaagtagcca aacacccaaa gaatcctgag gttggcttga 1740 ageotytyty gtatagtece aaagttttea ttgaaggtge tgatgeagag actttttegg 1800 agggtgagat ggttacattt ataaattggg gcaacctcaa cattacaaaa atacacaaaa 1860 atgcagatgg aaaaatcata tctcttgatg caaagttgaa tttggaaaac aaagactaca 1920 agaaaaccac taaggtcact tggcttgcag agactacaca tgctcttcct attccagtaa 1980 tctgtgtcac ttatgagcac ttgatcacaa agccagtgct aggaaaagac gaggacttta 2040 agcagtatgt caacaagaac agtaagcatg aagagctaat gctaggggat ccctgcctta 2100 aggatttgaa aaaaggagat attatacaac tecagagaag aggattette atatgtgate 2160 aacettatga acetgttage eeatatagtt geaaggaage eeegtgtgtt ttgatataca 2220 ttcctgatgg gcacacaaag gaaatgccaa catcagggtc aaaggaaaag accaaagtag 2280 aagccacaaa aaatgagacc tctgctcctt ttaaggaaag accaacacct tctctgaata 2340 ataattgtac tacatctgag gattccttgg tcctttacaa tagagtggct gttcaaggag 2400 atgtggttcg tgaattaaaa gccaagaaag caccaaagga agatgtagat gcagctgtaa 2460 aacagetttt gtetttgaaa getgaatata aggagaaaae tggeeaggaa tataaaeetg 2520 gaaaccetce tgctgaaata ggacagaata tttcttctaa ttcctcagca agtattctgg 2580 aaagtaaatc tetgtatgat gaagttgetg cacaagggga ggtggttegt aagetaaaag 2640 ctgaaaaatc ccctaaggct aaaataaatg aagctgtaga atgcttactg tccctgaagg 2700 ctcagtataa agaaaaaact gggaaggagt acatacctgg tcagccccca ttatctcaaa 2760 gttcggattc aagcccaacc agaaattctg aacctgctgg tttagaaaca ccagaagcga 2820 aagtactttt tgacaaagta gcttctcaag gggaagtagt tcggaaactt aaaactgaaa 2880 aagcccctaa ggatcaagta gatatagctg ttcaagaact ccttcagcta aaggcacagt 2940 acaagtettt gataggagta gagtataage etgtgtegge caetggaget gaggacaaag 3000 ataagaagaa gaaagaaaaa gaaaataaat ctgaaaagca gaataagcct cagaaacaaa 3060 atgatggcca aaggaaagac ccttctaaaa accaaggagg tgggctctca tcaagtggag 3120 caggagaagg gcaggggcct aagaaacaga ccaggttggg tcttgaggca aaaaaaagaa 3180 gaaaatcttg ctgattggta ttctcaggtc atcacaaagt cagaaatgat tgaataccat 3240 gacataagtg getgttatat tettegteee tgggeetatg ceatttggga agceateaag 3300 gacttttttg atgctgagat caagaaactt ggtgttgaaa actgctactt ccccatgttt 3360 gtgtctcaaa gtgcattaga gaaagagaag actcatgttg ctgactttgc cccagaggtt 3420 gcttgggtta caagatctgg caaaaccgag ctggcagaac caattgccat tcgtcctact 3480 agtgaaacag taatgtatcc tgcatatgca aaatgggtac agtcacacag agacctgccc 3540 atcaagetea atcagtggtg caatgtggtg cgttgggaat teaageatee teageettte 3600 ctacgtactc gtgaatttct ttggcaggaa gggcacagtg cttttgctac catggaagag 3660 gcagcggaag aggtcttgca gatacttgac ttatatgctc aggtatatga agaactcctg 3720 gcaattcctg ttgttaaagg aagaaagacg gaaaaggaaa aatttgcagg aggagactat 3780 acaactacaa tagaagcatt tatatctgct agtggaagag ctatccaggg aggaacatca 3840 catcatttag ggcagaattt ttccaaaatg tttgaaatcg tttttgaaga tccaaagata 3900 ccaggagaga agcaatttgc ctatcaaaac tcctggggcc tgacaactcg aactattggt 3960 gttatgacca tggttcatgg ggacaacatg ggtttagtat taccaccccg tgtagcatgt 4020 gttcaggtgg tgattattcc ttgtggcatt accaatgcac tttctgaaga agacaaagaa 4080 gegetgattg caaaatgeaa tgattatega aggegattae teagtgttaa cateegegtt 4140

```
agagctgatt tacgagataa ttattctcca ggttggaaat tcaatcactg ggagctcaag
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ggagttccca ttagacttga agttgggcca cgtgatatga agagctgtca gtttgtagcc
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gtcagacgag atactggaga aaagctgaca gttgctgaaa atgaggcaga gactaaactt
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caagctattt tggaagacat ccaggtcacc cttttcacaa gggcttctga agaccttaag
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actcatatgg ttgtggctaa tacaatggaa gactttcaga agatactaga ttctggaaag
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attgttcaga ttccattctg tggggaaatt gactgtgagg actggatcaa aaagaccact
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gccagggatc aagatcttga acctggtgct ccatccatgg gagctaaaag cctttgcatc
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cccttcaaac cactctgtga actgcagcct ggagccaaat gtgtctgtgg caagaaccct
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gccaagtact acacettatt tggtegeage tactgaggga tgaacgaaag eccetette
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                                                                     4800
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aatatggttt tigtatteat tigitteiga aaaatgigea tiatgtaeta igaggaaatt
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totacaaaga gatgaagaca attgaaagoo agotatotgt tattgatota agoactooca
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acatgtetea gaccetgaac egecagttat accetacaet gataggtete gaagcaettt
                                                                     5040
ctttccatag ctcctaatac agaatctgaa attggcctaa atctttctgg tttaaaaaca
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```

```
<210> 5869
<211> 1368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (366)...(1222)
<223> similar to gi241467 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

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<400> 5869
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gggcaagett ccacetteca tteetttett etecettage atgtattett cagaacttaa
                                                                      120
aatctcttca attctcacct gacctaaaat ctaagcatct tattttcttc tgcaatgctg
                                                                      180
cttgacccca atataaactc gacaggagtt ccaaatagcc agaaaatggc acattcaatt
                                                                      240
tttccatcct acaagatcta aataattctt gtcgtaaaat ggcaaatggt ctgaggtgcc
                                                                      300
tgaagteeag geattetttt acacateagt ceetteetag tetetgtgee cäätgeaact
                                                                       360
cgtcccaaat cttccttctt tccctcccgc ctgtcccctc agtcccaacc ccaagcgtca
                                                                      420
ctgagtettt ctaatettee ttttetacag acceatetga ceteteeet eeteettggg
                                                                      480
etgeteeteg cegggetgag etaggteeca attetteete ageeteeaet ceteeaeeet
                                                                       540
ataateettt tateacetee ceteeteaca eecegteegg tttacagttt catteegtga
                                                                      600
gtagccctcc ccctcctgcc cagcaattta ctcttaaaaa ggtggctgga gctaaaggca
                                                                      660
tagtcaaggt taatgctcct ttttctttat cccaaatcag atagcgttta ggctcttttt
                                                                      720
catcaaatat aaaaatccag cccagttcat ggctcatttg gcagcaaccc tgagatgctt
                                                                      780
tacageceta gaecetaaaa ggteaaaagg eegtettatt eteaatatae attttattae
                                                                      840
ccaatctgct cccgacatta aataaaactc caaaaattaa attccggccc tcaaacccca
                                                                      900
caacaggatt taattaacct cgccttcaag gtgtacaata atagaaaaaa gtttcaattc
                                                                      960
cttgcctcca ctgtgagaca aaccccagcc acatcttcca gcacacaaga acttccaaac
                                                                     1020
ggctggaccg gcagcagcca ggcggttcct ccagaacctc ctcccacagg agcttgctac
                                                                     1080
acgtgccgga aatctgggca ctgggcaagg gaatgcccgc agcctgggat tcctcctaag
                                                                     1140
ccacgtccca tetgtgtggg accecactga aaatetgaet gttcaactte acctgggcag
                                                                     1200
```

```
ccacteceag ageceetgga actetggee aaggetetet gaetgaetee tteecagate 1260 ttgggettag cagettgaag actgaeactg eeggategee teggaagee eggagaecat 1320 caeggaegee gagetgeeag taaeteteae agtggaaget atetggte 1368
```

```
<210> 5870
<211> 1553
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (373)...(1306)
<223> similar to gi2183323 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5870 egegteegeg gaegegtgga eggaegegtg ggegtetett ggeeegeget taaggeeete. 60 gegggggget tgtgggteet eeteeeete ceaetgaeaa etgeeeeaae tgëtetteee 120 gccccggtca cagtgaaaat gtagacgggg tcgttgtccg tacgactgtg cgccagggct 180 cggggagggg cgccctccgc gtgagcgccc ccctgggaat attgaacata atcacctctc 240 attecagaet atgitaggie tiaatggigg gaggaegeee gagigeiegg eeegiiteae 300 cccgaggagg aaggacactg ggtcatgacg ccatcagagg gcgccagagc agggaccgga 360 cgcgagttgg agatgttgga ctcgctgttg gccttgggcg gcctggtgct gcttcgggat 420 tccgtggagt gggaggggcg cagtctcttg aaggcgcttg tcaagaaatc tgcactgtgt 480 ggggagcaag tgcatatcct gggctgtgaa gtgagcgagg aagagtttcg tgaaggtttt 540 gactetgata teaacaateg getggtttac catgacttet teagagacee teteaactgg 600 tcaaaaactg aggaggcctt tcctgggggg ccgctgggag ccttgagagc catgtqcaaq 660 aggacagate etgtteetgt eaccattget etegatteae teagetgget getaettege 720 cttccctgca ccacactctg ccaggtcctg catgctgtga gccatcagga ctcttgtcct 780 ggtgacagct cctcagtggg gaaagtgagt gtgctgggct tgctacatga agagcttcat 840 ggaccaggcc ctgtgggagc tctcagcagc cttgctcaga ctgaggtgac cctgggcggt 900 accatgggcc aggcctcggc ccacatcctg tgtcggaggc cccgacagcg cccaactgac 960 cagactdagt ggttctccat ccttccggac ttcagcctgg atctccaaga ggggccctct 1020 gtagagtece agecetaete egateeteat atacceeegg tatetaagaa tgeeaaggee 1080 agaacaagga aatgtagttt agtatctggt cacgggagag aaaataaaag ctgcagaggt 1140 tgggggtggg gtcagggatt ctagggatgg ggcagagtgg cagcatcctt tgtacctaca 1200 ggtggatccc acaactcatt tgacctttaa ccttcacctg tccaagaaag agagagaagc 1260 cagagatage etgateetge cettecagtt cagttetgaa aagtaaggtt gggacetggg 1320 tacgtggatc cctgagtaga tcccagcatc tgggccatgg agaggttggg gcaacaggtt 1380 attgattaac ctgactttat agggactgaa gtccacctcc agagacaaqt ccaaqttctt 1440 gatecaceca tteccectat aatggeagag gaeetttatg tetetttet etecettata 1500 cccttggatc acagetecag ttgtecccag ageaecetgg geetgggetg age 1553

<210> 5871 <211> 1831

<212> DNA

```
<220>
<221> misc_feature
<222> (1718)...(746)
<223> similar to gi5668733 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5871
ccatctcaaa attcttaatt ctatctgcaa agattctttt ccaaataaag taatatttat
aggttctgag ggttagggca tgaacatatc ttttgagggc taccatttga tccatagctg
                                                                      120
ttcagcggtt tacattctcg gatttgacag tggcatgctt cacttgtgac tgtgccattc
                                                                      180
tggaatgagg ttgaccagat ggtgctgctg gccacgtcaa actcatccta caggctgtag
                                                                      240
caagcaagge teacacetee ceatgtetga cacetgtgaa teacagetgg gtetetggaa
                                                                      300
aaatgagtga gtgcaggaac aaaatcaaac aggagacctc atccaccact aggtctcaga
                                                                      360
gaggacattg cageceetga aaagagagea tetetettgg aacttttgta eteagttgta
                                                                      420
ttaacgcggc aaggaaaatg gcacatttat gttggaaaat gtaattattt atggcacctg
                                                                      480
tgacaactgg gcactttgga atcacaaagt ttatggttga agaccacttg gggtgattat
                                                                      540
cctccaaaat gtttatttgg cttcttgaag ttctgcagag gttgaggcag ctgtctcaaa
                                                                      600
actagaggac agagecetgt gggeaggtgg gtgtgagaaa eteaaacace geagtettea
                                                                      660
cagacccaca agetattggc aggtgcaatg tgtttcttgg ggcagcagct atcctgagac
                                                                      720
aggatateae agggteaeat caaggaceee agteatetea caactettag accacagetg
                                                                      780
ctgctgcagt ttctggttgt aggtgacgtg gagggacttg gtctctttct tgttgtatag
                                                                      .840
gtaacggcca ccaactcctt ccagctctgg ggtgactgct gcgtagatgg aagtccacgc
                                                                      900
tectteateg ggggtettga aaageaacea geegagaage ttettegeea gaegggtgge
                                                                      960
ccagaacacg tgcttgtaga ggtccgtgtt gaccacccg gggtccacca cgttggcggt
                                                                     1020
cacgtggctt ccctcagccg ccagcagccg ctggaggtgg taggtgaaca ggacaagggc
                                                                     1080
cagettgete tgggegtagg etgegtgggg tgagtageag geaetgetet gaaggteate
                                                                     1140
catgttcagc tcagcgacgt aatgggtggc agaggagacg gtgaccaccc tcgcactgtg
                                                                     1200
gccaggggac ccagactett teagegtate caagaqaagg ttggtcagca qqaaqtqccc
                                                                     1260
taggtagttc aggccgaaat gttcttcgaa tccatctctg gttttcctct gagggaccat
                                                                     1320
catcacccca gcattgttga tcaggacatg gagaggaatc ttcttcatct tgaacttctg
                                                                     1380
cacaaactgc cggatggaag tcatggaagc caagtcacag tataaaaatt ccaaatttta
                                                                     1440
ggaggaaatg atggtgcacg cctgtagtcc cagctcctcg agaggctgag gtgggaggat
                                                                     1500
egettgagtt ceagaggeaa agecageeeg ggeaacaeag caagaeteae gtetetttgt
                                                                     1560
egiteaaggi tiettettit attitgetta caactigitt ggettigeig teattatite
                                                                     1620
cagetatgat aacatgcatg ccaagteteg ccagatgett egetgtagaa tagecaatge
                                                                     1680
catctgtccc tcccgtcact atagcgacac ggtcaggtcg tggggggaaa acctggggtg
                                                                     1740
ggtaggggte gaggteeetg ggacgeeege teeteeete eggggeetgg egggggegeg
                                                                     1800
cggtcactgg ccgaccgcag gcggcaggca g
                                                                     1831
```

```
<210> 5872
<211> 774
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (202)...(774)
<223> similar to gi1389766 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5872
ggaggaaaca cacattaaaa ataaattaaa accttaatta tttaattaca agcgtgataa
                                                                       60
atgctaaaaa taggaggcac aggaaagcag gataacctat aattggagga aaacctgtct
                                                                      120
gggagatcaa gaaggcattc ccatacattg tcgtgacaac cttttttgga aggcaatact
                                                                      180
gaagtetatt aaatgacaca geteettega eetagetgtt eeaetttagg aataaaagta
                                                                      240
atatagcaat aaaagtaata ctacttaaag cagcatgtgg ctttggctcc cagtgaagtt
                                                                      300
gcaggtgtta caaagcataa tatgcctcca agccaggctg cccaaaaaggt caaatccaga
                                                                      360
aaccagtcta atagactgag gaaagcaagt gaaggtaact tgacacgcca taaagaactg
                                                                      420
ttcaagtgag tggactcatt gtgagatgcc tgatgcactc cagagaaatc agatttaggt
                                                                      480
ccaatagcat aatacaagaa gtcaagcacg tgagggcctc ctgtgagatc tcgatggggc
                                                                      540
agecaggeac ggggaeteae geetgtaate teageattet gggaggeeaa ggetggagga
                                                                      600
tcatttgagc ccaggagttc aagattagcc tgggcaatat ggtgaaaccc catttctaca
                                                                      660
aaaaaataca aaaaaaatta actgggtatg gtggtggtgt gtgcctgtag taccatctac
                                                                      720
tggtgggagc tgaggtagga ggatcacctg agcctggaag gttgaggctg taag
```

```
<210> 5873
<211> 1322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1116)...(203)
<223> similar to gi311667 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ttttttttt ttcacattac cgaaaggcca agtaatgtgg tgtgattact ataattccta
                                                                       60
caacaaaact tocacttaga atagttacat gttoccaaac tatttttott otgtotgoca
                                                                      120
tgctggcttc tgtatcccat ggtccactgt aatctttttg gtcttctttt tttgcagtac
                                                                      180
agcagtcctc gtgctgctat ccattgagta ggtaaaccac caattcatag gtggccatca
                                                                      240
taatggctgt gtttgggaat ctgtctcact agatgagttg tcagaccacg ataaagagac
                                                                      300
ccataacctt cttcttgaac aagcaaagat agagtctgaa aaaaagatct gtattttgtt
                                                                      360
ccctcttcac gtagtcttgt tcttacaact tcatgtggat atgctatagt tgtggcaaca
                                                                      420
agtttttgag gtggcagcag ctagcatcat tcccacaaaa tctgatgctt ctttcacaga
                                                                      480
ctcttcatca ttttccattg tagaagcagt cttatattcc agtagttttt gttttatact
                                                                      540
ttcataaata acaaaatgga taacagtctc tgatatacca gcatatgaag cagacatgcc
                                                                      600
cctataaaat ccttttagtc catctgtctg atacacttta cgaacacatt caaaagcacc
                                                                      660
cattegeett tteecegegg tteettgeat caaagetgta accgagtett tataagecaa
                                                                      720
atggggttgg ttgctgtgat tgcagtaaaa cctgccattg cagctgaaat catatgtact
                                                                      780
tgggtagaat caggatcaaa tacatcattc aacttttcct tgcagtttga ataagcagca
                                                                      840
aagtatattg ctctggaagg ggctaccccc actaaattgg ggcctagtcc tctaaacaag
                                                                      900
gaacgaggcc cttcttttc caagatcacc tttaggcaat gaagaggtcc gggagacact
                                                                      960
actoggttga cactggctcc agccatggtg ttcagctgaa cttcagaaat ataaagcgtc
                                                                     1020
acagaagatg actgcagtcg tgtttttaca acttccagtg gacatgtcag aatagctccc
                                                                     1080
```

```
actgtaccac cacatectec ggeaaacaga tgeaceageg tgteeetetg geteattete 1140 tetecegeat gteeteegge egetgaggeg ggaegeggat etggeegee getaeggeag 1200 geggettegg teeeggaetg gagaegeaca gegeeeggg gaeggegagg agagetggee 1260 gagatgegge tgeagaaage aaceggeaca geeeteeeg eggeaeteea geegegaega 1320 aa 1322
```

```
<210> 5874
<211> 1038
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (776)...(992)
<223> similar to gi299471 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5874 -
tttegteteg gttagggeet eategetetg etceegetee ttagggaage eteggtgatt
                                                                       60
etgecacage etcageetet gtggetetgt gacetgeegg tattggatga ttegtateta
                                                                      120
agactetggg acacteetga agtegggaaa tggtgagtgt geagggeagg gegteecaag
                                                                      180
getgtggagg ceteategga aceggeggga aatggeggeg gtgggaggag tetgtgaatg
                                                                      240
gagtteeege teagecetet gteeteagte ceeteeggtg agggaeeege getettgtea
                                                                      300
                                                                      360
gteccegtae ageggetetg geccageetg cageeeteet tgtgeagete tgegeeggta
gccctgcact ttccccgggc tgtggagtga gtaggagctc atccggaaga caccgcggcg
                                                                      420
geetgegegg tgeeggegtg ggaggagetg tggteeggaa teeegteeet aetttaceet
                                                                      480
gttcagaatg agattgaggc cccatcaaaa catggagttc atgtgagcaa acaggactta
                                                                      540
ttaatgggaa agetetgeeg tggetegtgg tttggggaet geeagegggt ettgaaggaa
                                                                      600
aggettttgt gaggtgtgtg aggaagegaa geaaateaee tgeetgegee aaetttgeeg
                                                                      660
ccagtcccct tgccctgtgc gcctcctccg cgtggctgtt cctgaatacg ctggtgtctg
                                                                      720
ttegeatett ttagaataeg etggtgtegg tgegeaeage gettetetta gttetaegga
                                                                      780
gtcttcgctg tgtcgccagg ctggagtgca gtagtgcgat ctcggctcac cgcattctcc
                                                                      840
acctcccagg ttcaagcgat tcacctgctc agcctcctga gtagttggga ttacaggcgc
                                                                      900
gccaccacac tcagctaatt tttttgtatt tttagtagag acggggtttc gccatgttgg
                                                                      960
ccaggatggt ctccatcttc tgacctcatg atccaccage ctcggcctcc caaagtgctg
                                                                     1020
ggattatagg cgtgagcc
                                                                     1038
```

```
<210> 5875
<211> 1762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1678)...(388)
<223> similar to gi23874 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5875
ttttttttta taaattcatg acacttttta ctatgcccca ttgcacgttc tcatccatgg
                                                                   60
atttgccttg ccgttaagaa ttaattaacc atggccttgt ggccctgggc tgacccaggc
                                                                    120
180
ctcctaatac catgtcatca agtgttcaca attttccaaa atgaagttga agtgccttga
                                                                    240
tetgtecact gecaceacea accagtgetg gagttttece atgtgggttt tgetttttgt
                                                                    300
ggtgttaact ggcccttgct gctaagagca agcaaggact gttctgcgta agcgcctgcc
                                                                    360
agectgggga ceteacteaa gtteeceagg ggtatteaaa gaceggeage gggeteecat
                                                                    420
                                                                    480
tecagetece gatggeacat ggacaaceae teeggtatge cetettecea egggegette
agetteattg ageaagegtg atgacetgta egtgeeecca gtgeageeca agggggtgge
                                                                    540
cctaagggcc actggcaccc cccagggggg ttcacccttc tcagggggga agtcgtagct
                                                                    600
tetecacaca gtaggeagee tggettgeaa aggeeeteat tgatetegaa gätgteeacg
                                                                    660
teacteactg teagecetge tttttgcaaa getactggga tggcatagge aggtecaatg
                                                                    720
cccatgatgt caggtgggac cccaaccact gcataagacc tcaggacccc aaggatggga
                                                                    780
aggeceaact ettetgeett ggaceteegg geeageagga tggeagetge eecateacte
                                                                    840
acctggctag agtttccagc tgtggtagaa ccatctttct tgaaggcagg cttcagtttg
                                                                    900
gccaggccct ccatggtggt gctggggcgg ataccctcat cctgggtcac agtgatgctc
                                                                    960
ctcttggtgc ccttgtcatc atggaccgtg gtggtcacag gcacaatctc agcttggaaa
                                                                   1020
cagecettge tetgggetet tgetgeette tgetgggaag eeagggeaaa ggtateetge
                                                                   1080
ttctcccgtg aaatgccaaa ccgctcagcc acattctcag aggttatccc cataggaatc
                                                                   1140
aggeaatete tggeettete etteteeate aagegegaag taatatttee agggtteeet
                                                                   1200
ctgtcagcca gggacatgga ctccacccca caggccatgc caatgtcata agacccattt
                                                                   1260
ctgatgccac ctgctatgct ggccactgcc tgtagccccg acgaacactg tctattgaca
                                                                   1320
gtggacaaag gcacagtctc cgggatgtca ctcagaaact gggcgattcg ggccatgatt
                                                                   1380
gccccggccc caggctgcag cacatttccg acacagatgt cccccagctg ttccggcctc
                                                                   1440
agattcacgt ccttgagaac cgcggtcatg actgccgaga gaagctcgtc gggggtggtg
                                                                  1500
teettgaage egeegegee egeeggeag atggeegtge geegeeegtg caccaccace
                                                                   1560
acateegegg cegaggeatg eggggeaceg eteaggeaag gegeggeetg eggeateeag
                                                                  1620
ceggaategg ceggaceet caggtggeec ageactacet geageetetg cattgegeag
                                                                  1680
gtcaaccctg cagaccagcc accagtccgg gaactgaccg cggagttaac agacagccgt
                                                                  1740
ccgcacacgc gcagaaccac at
                                                                  1762
```

```
<210> 5876
<211> 1140
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1108)...(443)
<223> similar to gi4454696 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5876
gggaggaaag ggaaggtatt agacgccgcg cggggattgg tttttgtgtg taattatggg
```

```
atagggttgg tgagatggtt ttgggttggg agtggtgttg gtggttgttt atatgttttg
                                                                      120
gaggagtggg actccataag ccctttctgt aatataagta tgctaaatgc cacggaagcc
                                                                      180
agatacattt attaaatcta ctcttagcca agcaataaag atgtgtacag agttcacaac
                                                                      240
ctgcaacact tcaccaggga atgctaggta aaggcaactt cagtttaact gagtactcca
                                                                      300
tttcaagtgg gtaatgtctg ctggttggca gctatccagt ttggaaaact gtggaagatg
                                                                      360
ctgttgctac ccagattgtt ctgttcaaca agtgggcctg aagcctgagc agtgtagcca
                                                                      420
                                                                      480
gctgtgtggg gagcagaggt tcactccatt gcttctgcag cctcctcacc tgactcctcc
tectecteta. gtaageaget tettgteaca gaettetgga tagetteeeg eteteettea
                                                                      540
tcagtgcagt tctgcaacaa gatcaacagc tgtctcctgt tgtactgaat taggaacttc
                                                                      600
tgacatgttc ttattgtacc tggcatatga gttactgtgg tcaacagctt gtgaaaggtc
                                                                      660
tegacettae agaettteag aggtaggggg aaggtettgt tagegggaca geageaagae
                                                                      720
ccacccacca gtttagactg aactgtgaac gtgtcaccaa ttgaaaatca gtagccatac
                                                                      780
cacctcactc ctacctccca catgtaatgt gttgaaaaag catgggtaac ggtgtccttt
                                                                      840
gttctccaag tatgtgatga agggaagagc tgaccacaca agctgataga attcttttct
                                                                      900
gcatcgaagt agcactatte cagtatagge attgagatat cgaaccgcga agccgatgga
                                                                      960
geaggegget gegeegaaag tteegtgeae eetggegate gtgteeegta egaggetget
                                                                     1020
cagaactegg teategagge ttaggeggea gegggggteg teagacacea gttegeagag
                                                                     1080
caggtacetg tgettgaace geaceatgge tgeeteegeg eteteeagte egetegtgee
                                                                     1140
```

```
<210> 5877
<211> 2474
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2475)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> similar to gi5305335 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5877
tttttttt ttgcgaatct gttgatttat ttacggctcg gtgagacgac gctggacgct
                                                                     60
ggttagggta agggttaggg caagcattag cagcaggggc atggccctgg gaagcacctg
                                                                      120
gaccccagaa cataagacag gagggagaga tgccatccat tcagcgggca cttatgccca
                                                                      180
cgaccagctg agccagacca gcattcccat ttcaccaccc cttactcctc aagatgcaaa
                                                                     240
tgaageteag ggetgggegg aagetggeag ggetgteeae agggaggaee eeegtgtgte
                                                                      300
tetegggetg cecaggtgge tetgtedace ettetgtetg ggaggeteet taaggetggg
                                                                      360
gagggcccag agggaaggag atcctgaggg gctggcagat tcaggccctc cctgcgagct
                                                                     420
gaggtttgaa gaggagagca gaccacccag agtagtggga gaaagcaccg gcagaaaagc
                                                                     480
tggcatatcc accgagggcc tctctgcttc ttttgacctt tttcagagtt tcagagttat
                                                                      540
gaaccaaatc gccttcatga gagatgacga atcagatgct acatagtggg ggaggcggca
                                                                     600
getggeetgg etceeccact tecceaggae etcegeetgg aggaageetg eccagggeeg
                                                                      660
cagecetgee eccaaagace ecaggacaga ecagagetee tgetggagee gggtgteece
                                                                      720
atgetgacet ggeeatgtee ceaggteeea ceceagggte aetteetgta geteegaett
                                                                      780
ctctagtggc tgattgcagt tcccagaatg tataacatcc cagggtgcca gagcccaccc
                                                                     840
```

```
aagcagccac teetgteeag, tteecagaat gtataacate eeagggtgee agageeegee
                                                                      900
caagcagcca ctcctgtcca gttcccagaa tgtataacat cctagggtga cagagcccgc
                                                                      960
ccaagcagcc actcctgagt cactcgggca tgtccaggac tcaggtccac acagacagtg
                                                                     1020
gcaacagcta gccctgggca tctaccccca tgaaggggac cctcggttct gcgagagaga
                                                                     1080
teccegaagt gggaactggg eccecatggt geccagtgee tetececete tectetgeca
                                                                     1140
                                                                     1200
ctctgccctg cacccagagg cagcgctgga ggccttactc taccactcag ggcttctcaa
acctetggtt ccaettttet cettttaage tttecatttt gtaaacteae eteceeette
                                                                     1260
ccaggettgg gggtccaagg aaccccaget ggtgggagaa gegtetgeac tgtggtgcag
                                                                     1320
ggggtggtga gtgagcgagg aggcactagt gtggggcagc tacttcacct ccctgtgcct
                                                                     1380
etgtgteete etetgteaaa ggggeaagat aatggeteee attgeeggge tgetataeag
                                                                     1440
tgctcagggc cacagtgcag tggggggacc cacgtccatc gccaccttga tgcatacaac
                                                                     1500
ceggacaagt ttactgctgt gatttctgcc ggcgctgctg tgccggttcc ctggtgctgc
                                                                     1560
acagecacge actecceatg agtgggeetg eccageatta getgagtgee ttetgtgtge
                                                                     1620
tetacgecag gtgccaaggg caggccagce aggcagaace atgtgtgggg ctgggacagg
                                                                     1680
tcagggtggt ggaaaggtgg acagaaggag gcaggaggca ggtgtgagaa gctgcccacc
                                                                     1740
ccaccectca acaccacage acttccaget ccagcaggte cttgttetea getgeecetg
                                                                     1800
agccatgggt ggccaggtct cctccccatc accccactga gactcgagac agggaggacc
                                                                     1860
tgatcctgga gtccctccca gccctggctg aggaagccac ccaacccgac aatgggcttg
                                                                     1920
cgcaagcege geagtgactg eteccageet eteccaagga ettaggagee caaagcegee
                                                                     1980
teceteeegg tgageateee aaggeatege tggetgeage tgagagggee teatttggge
                                                                     2040
actgcnectg aggetggeac ttgcaggtgg gggeeettgg gagetetggg aggeacetgg
                                                                     2100
cagectecca gacaceeegg geoggteetg etetecagge ttagggetae agecacaace
                                                                     2160
actgggggta ggggcgaggg gagtccaggc ccaccetgtg etggcagcaa eteetteeca
                                                                     2220
getetgggee cagtatgatg eccatettee etetggggag teaegtteet eeegeteegg
                                                                     2280
gcccgttccc acccaaggtc cctttgcaga agactggcac tgtcctcctc cagcgggaac
                                                                     2340
tgggtgtgcc ctcagcaaga ctctgccccc tcccatcctc atgttctcag gagactgaag
                                                                     2400
ctgggcactc agaaccagcc ccaggagcag aacgcaggcc tgcatataga ctcactgcaa
                                                                     2460
ggcggacgcg tggg
                                                                     2474
```

```
<210> 5878
<211> 1938
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (48)...(1654)
<223> similar to gil388193 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5878
ctattctgtc aaagagacgg tgccaaaagg caaaaacaaa ggagctgatg gcaaagaagg
                                                                       60
tagctgtgat tggagctggg gtcagtggcc taatttctct gaagtgctgt gtggatgagg
                                                                      120
gacttgagcc cacttgcttt gagagaactg aagatattgg aggagtgtgg aggttcaaag
                                                                      180
agaatgtgga agatggccga gcaagtatct atcaatctgt cgttaccaac accagcaaag
                                                                      240
asatgteetg ttteagtgae ttteeaatge etgaagattt teeaaaette etgeataatt
                                                                      300
ctaaacttct ggaatatttc aggatttttg ctaaaaaatt tgatctgcta aaatatattc
                                                                      360
agttccagac aactgtcctt agtgtgagaa aatgtccaga tttctcatcc tctggccaat
                                                                      420
ggaaggttgt cactcagagc aacggcaagg agcagagtgc tgtctttgac gcagttatgg
                                                                      480
tttgcagtgg ccaccacatt ctacctcata tcccactgaa gtcatttcca ggtatggaga
                                                                      540
```

```
ggttcaaagg ccaatatttc catagccgcc aatacaagca tccagatgga tttgagggaa
                                                                      600
aacgcatcct ggtgattgga atgggaaact tgggctcaga tattgctgtt gagctgagta
                                                                      660
agaatgctgc tcaggttttt atcagcacca ggcatggcac ctgggtcatg agccgtatct
                                                                      720
ctgaagatgg ctatccttgg gactcagtgt tccacacccg gtttcgttct atgctccgca
                                                                      780
atgtactgcc acgaacagct gtaaaatgga tgatagaaca acagatgaat cggtggttca
                                                                      840
accatgaaaa ttatggcctt gagcctcaaa acaaatacat tatgaaggaa cctgtactaa
                                                                      900
atgatgatgt cccaagtcgt ctactctgtg gagccatcaa ggtgaaatct acagtgaaag
                                                                      960
agctcacaga aacttctgcc atctttgagg atggaacagt ggaggagaac attgatgtca
                                                                     1020
teatttttge aacaggatat agtttetett tteeetteet tgaagattea etegttaaag
                                                                     1080
tagagaataa tatggtotoa otgtataaat acatattooo ogotoacotg gacaagtoaa
                                                                     1140
ecctegegtg cattggtete atccagecce taggttecat titteceaact getgaactte
                                                                     1200
aagetegttg ggtgacaaga gttttcaaag gettgtgtag eetgeeetea gagagaacta
                                                                     1260
tgatgatgga cattatcaaa aggaatgaaa aaagaattga cctgtttgga gaaagccaga
                                                                     1320
gccagacgtt gcagaccaat tatgttgact acttggacga gctcgcctta gagataggtg
                                                                     1380
cgaagccaga tttctgctct ctcttgttca aagatcctaa actggctgtg agactctatt
                                                                     1440
teggaeeetg caacteetat taatategee tggttgggee tgggeaatgg gaaggaqeea
                                                                     1500 -
gaaatgeeat etteaceeag aaacaaagaa taetgaagee aeteaagaet egggeeetga
                                                                     1560
aggattcatc taatttctca gtttcttttc tgttgaaaat cctgggcctt cttgctgttg
                                                                     1620
ttgtggcctt ttttttgcca acttcaatgg tcctagtcag cataatgctt tgggctttat
                                                                     1680
tatcttgtca gtcactacct cctaaagaaa aaaaaaaagg ctaaaaaaaa aaacattaca
                                                                     1740
ttcatgttct aattataaat tttaaagtta ggtactacag gcagggggga aattgtaaag
                                                                     1800
aattaccaaa attaggctta tgtacaaaac caaaatttgg ccatgaaatt ttgcctttcc
                                                                     1860
atgetteeet eagtteacea aagttaeeaa aatgtaaaat aaaataaaae tggeteaggt
                                                                     1920
aagtagggct gccaaccc
                                                                     1938
```

```
<210> 5879
<211> 2789
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (438)...(1674)
<223> similar to gi36603 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5879
cccacgcgtc cggcgatgcc taagcggttc accttttagc caaggtcctc cagcgttcct
                                                                       60
agageggaga agaaageget eegaagaget agagetgaca eteggegatg agetaagaeg
                                                                      120
ctgtttcaga gcgtttgggt cctctgaggc cccttgacca ggagtgtctc tgaagataca
                                                                      180
gtccaaagaa agttctccaa aacaaggaga gcagtctgaa gctggggatg gcaacagcat
                                                                      240
tggtgagtgc ccattccctg gctcccctga atctgaagaa ggaggggctt cgggtagtga
                                                                      300
gggaggatca ctactetact tgggaacagg gattcaaget gcaaggaaac agtaaaggec
                                                                      360
ttggacagga gccattgtgc aaacaattca ggcagttgcg ttatgaagag accacaggac
                                                                      420
ctcgagaagc actaagtcgg ctccgggagc tctgtcaaca gtggctacag cccgagaccc
                                                                      480
ataccaagga gcacateetg gagetgetgg tgetggagea gtttetgate atcetgeeta
                                                                      540
aggageteca ggeeegggtg caggageate acceàgagag cagggaggae gtggttgttg
                                                                      600
ttctggagga tttgcagctg gatcttggag aaacaggaca acaggtggac ccagaccagc
                                                                      660
caaagaaaca aaaaatactt gtggaggaga tggcccctct gaaaggagta caggaacagc
                                                                      720
aggttcggca tgagtgtgaa gttacaaagc ctgagaaaga gaagggtgag gagacaagga
                                                                      780
```

```
ttgaqaatqq gaagcttatt gtagtaacaq actcttgtgg aagagtagag tcatctqqqa
                                                                       840
aaatatctga acccatggag gctcataatg agggctctaa cttggaaagg catcaggcca
                                                                       900
 agcccaaaga gaagattgag tataaatgct cagaacgtga gcagagattc atccagcact
                                                                       960
tggacctgat tgaacatgcg agtacacaca cgggaaagaa actctgcgag tctgatgtgt
                                                                      1020
                                                                      1080
gtcagagttc cagtcttaca ggacataaga aagtcctctc ttaggagaga aaggtcatcc
agtgttcatg gagttttggg gaaagccttt cagaggagtt cacacctcgt cagacatcag
                                                                      1140
aaaatccatc ttggtgagaa gccttatcag tgcaatgagt gtggcaaagt ctttagccag
                                                                      1200
aatgeaggee ttttggaaca teteagaatt catactggag agaaacetta tetatgtate
                                                                      1260
cattgtggaa aaaattttag gcgcagctct caccttaatc gacatcagag aattcacagt
                                                                     1320
caggaggage cetgtgagtg caaggagtgt ggaaaaacct ttagtcagge ettacteete
                                                                     1380
acccaccate agagaateea tagteactee aaaageeate aatgtaacga gtgtggaaaa
                                                                      1440
gctttcagtt tgacctcaga ccttattcga caccacagaa ttcatactgg agaaaaacct
                                                                     1500
ttcaagtgta acatatgcca gaaagccttc cgactaaact cacaccttgc tcagcatgta
                                                                     1560
agaatccaca atgaagaaaa accetatcag tgtagtgaat gtggagaage ettcaggcaa
                                                                     1620
aggtcaggtc tttttcaaca tcagagatat caccacaaag acaaactggc ttgatgaggt
                                                                     1680
gtteteteet tgtagaacat cagagaagge acattgaeta geaaacagea etttaggaaa
                                                                      1740
agtcaccgta gcccactgtg gcatcagaaa attcttgggg gctgagttgg aggctccctg
                                                                      1800
cetetattet eteteettig ettteettiga agteagettt ggaccacaat aattteaetig
                                                                     1860
tagatgatat gctaggatca aagttaaaca gcattcttca ctgcaggaca tctcagagca
                                                                     1920
tgtaacataa ctgcatgatt atatactcta agcaatagag agcttcatga ctgagtaaga
                                                                     1980
gttttgaagt cagcagtgaa tcaagtgccc acagatttgc aggcttaagc agaacaaggg 🥡
                                                                     2040
aagattgata tttttggata tgctatagca gctttctcct atgaaataaa actgatgatg
                                                                     2100
tttggaagta tactactctc aaaggtgtct ttaaagtaca ggttaatggt gaacattttc
                                                                     2160
ecccagtgge tteaceteat tecteceaet ggeettacee etteetteee cagtggaage
                                                                     2220
attttcaaaa gcaaagataa ttttcgctgg tgaacttcag aacttgcctt cagggttagc
                                                                     2280
ttcatgtaat tttaccattt cccatcccca ttccccacca cattatgtca agattcaagt
                                                                     2340
tataaattaa cgttttactt agactttgaa agagatttca tgagtaattt gaatgaacct
                                                                     2400
tgctgaatta atctgaatag caactgtctg acttgataac tccagtgcca gtatagtggc
                                                                     2460
tgctgcatag acactattca gtaaatgtct gatgaaagaa attggacttt ttccctttaa
                                                                     2520
tactgatgat gcaattttga aatgttgctt gttctggaat acttcggaag ttaaacaata
                                                                     2580
aagtcagett ggagaggaga teatgatett tätaetgtga atageagaat gteacagatg
                                                                     2640
aagaatatta aaattagggg cgtccactcc aaaacatatc accagagtga caacttcagc
                                                                     2700
cctcagcctc tgcaatccat atatacctg gtcttgggag tccatagaat actgtttcct
                                                                     2760
tctaataaag gtttcaaaca aaaaaaaaa
                                                                     2789
```

```
<210> 5880
<211> 2966
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2836)...(86)
<223> similar to gi1702932 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5880

ttttttttt ttatatagag attgtacatt tatttattac tgtccctatc tattaaagtg 60
actttctatg agccaaggtc ttttactttt tcttcttgcc tttaggggct tcagggggtt 120
tcccctcagc tacagccaac tgtttcttta gatccaagag tttcgccacc tccgcagcaa 180
```

```
cctcgttctt gtctgccttt tgtgctttca gttctcggac aatgtttcct tgttttgtca
                                                                    240
                                                                    300
cttcatccat cagcgcttgt atctgctgtg gcttggctgt tgtaacagtc tctacaactg
ctggcttcgg ggacgttttt gcctggcccc ctccaaagcg ctgccttaaa ctttcaatct
                                                                    360
                                                                    420
ggtcattttc caatttttgg aacaagggac tgactgtgcc aatctggtgt cctgctggta
                                                                    480
aggtacacag gaagtttgtc agcaggatac tgcaggctgg aggtgggagc tgcagctggg
cctggattgt ggcactaacc gtgggcatgt aaggctgaag catgacagag agcaaggcag
                                                                    540
ctatattcac tgccaagcca gtcactgttc ctgcccgttg cctgtcagcc tcactgcctt
                                                                    600
                                                                    660
taatccgctt cccagggctc attcacctgg aatatattgg ttgccatgtc ggagatatgg
tgaggatact gcgcaaggca tcccggatcc gaacettete aagtagettg gtgatagtge
                                                                    720
tggageteca gggtgaeatt gggeeageag gegetgatea teaggggtga geaceatete
                                                                    780
                                                                    840
aggcacatag cccccaaag aacttagaca caaacatccc aagctctgtt gatgaagttg
cccaggttgt taagcagctc aagaattatt cttcagcagc aggtccgtcc aggagaaagc
                                                                    900
actgtcgctt gccctcaggc cgaatgtaca gcaagataga agcgcgagat gtcaggaggg
                                                                    960
atccccgtgt cgtgggccca tgtcccgaaa cactcccaca ccgcggctct tagagaattt
                                                                   1020
teccateete atagtteagg taetetgtag caatgaggtg getgacacaa ggtatagtta
                                                                   1080
tecteagete etagggetga getaggaaag actaagetat ggaaaggaac attgtetttg
                                                                   1140
gcccatgaac tgatacaggt cgacttgctc tgggttcgtt ccaccatctc tcccactggt
                                                                   1200
ctgtgtagtt ggctgtgatg gacagatagc caatagtggc atcaaaccag acatagaata
                                                                   1260
cccttgtctt caaaaccttc ttaaggggta ccagggttcc cccaatttga ggtctcgggt
                                                                   1320
ttattgccag cgtggctttg agggccattc ccggaagcca aagaacgggg tgataaactg
                                                                   1380
ggcattgggt gtccagtcac tgccaggcaa tgtcctcccc aaccactcct ccagtcgctt
                                                                   1440
ctccagctta ggcaggtcca gaaacaggtg ctggctcgac tgcaccacag ggcatgateg
                                                                   1500
gcagacttta cactgaggct tcttaagctc gacagcattg atgagcttgc cacacttgtc
                                                                   1560
acactggtca ccccgagcct cctcatagcc acagaaggga cacacgccct ccacgaagcg
                                                                   1620
gtcagccagg aaagcgagca cagtgetcac ategcagttg etecacagta tettgcagca
                                                                   1680
caaaacctcg tttcagcaac tgctggaaaa tgtcctgggg tgattttggt cttgctgtgg
                                                                   1740
agtggtggtg cgaccaaaaa tatcaaacga aatgttaaac cagcgggtag atgtcagcat
                                                                   1800
ggatgatgtg gtacttgtcg cagatetect ggggggttag teceteetee cagageettg
                                                                   1860
gtototgttg otgtaccata otcatotgto ocacaçagat agagggtgtt ocactggogg
                                                                   1920
aggogagagt acctggcaaa gacatoggca ctgagcacac aaccaatgat gttcccaagg
                                                                   1980
tgggggacat tgttgacgta agggagggca ctggtgatga gcacattcct ttctccagcc
                                                                   2040
acaggeaaca etggattetg etggggeege agegggggea aaetttetag geeettetee
                                                                   2100
caagcagtaa cagccatagc aatctcctcc tcagataggg tagccagctc ctcctcctca
                                                                   2160
ggctcaattg gtgacagccc tttcccttca gcggggctgg gctggggctg cttttggagg
                                                                   2220
taaggcccgg agagccagga caccttgctt gtttcagtac aagtcttctt gcagcttcgc
                                                                   2280
tgacatggtt ccttgggtac tcagtgtctg gaaccagctg tgcagggcac tcagctcctc
                                                                   2340
agggaggtag gegggatett geagtaatgg gtataggget eeccacaaaa caatgtegge
                                                                   2400
tagagattet gtetececag ceaggaaagg acagtttetg acgaeteaag etgtggteaa
                                                                   2460
tgtgagtcag ggttctccgc actgaaccaa gaacatcttc cccctttctt gccttggacc
                                                                   2520
acttaaatag tacagggcag cagacaaagt tggctgcagc tctgtcgctt cccattccag
                                                                   2580
2640
ttgcactagt ggagaagagg tagttgccgc tatccagctg caagacaggg accttaggcc
                                                                   2700
gggtcaggaa cgggaccaca caatetteeg ggectacagt getgatgage acetetgete 🚿
                                                                   2760
tgccccgggc tctcccggcg gcggccagca ccggcaagca acccggaacg ccatcactca
                                                                   2820
egaacagtet catttegeeg tgaatecete getgatttat aaagtgeetg etttteetgt
                                                                   2880
gggaattcca gaatagatat aatggtggtg gccaggggct ggatggaggg ggatagaaag
                                                                   2940
ggatagetee aaggaggetg gggtgg
                                                                   2966
```

<210> 5881

<211> 842

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(569)
<223> similar to gi32472 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 5881 aggggctggg ccctgggaga gaggaggctg tagctggggg ctccagcccg cagggcccag 60 cetgggtgtg teetgeaget cetgetgagg etgggeceag geeteecage caegtgtgee 120 cagctgtttg taggtccttt gaagggctgt gtgccaggtg tttgtgcgcc cccgtgtggg 180 geogatgaca getgtgeace tggtgtette gtgtgeetgg etgeeagege gtgtgeetg 240 tgegetgtgt gteeegeagg gteegtgtet gtgggggggt ceatgtgtae aaggggtgtg 300 tetecaggee tgtgetetea egtgtgegge cageeceeeg egtgeatgeg gggeageatt 360 tatttgcact tggtgcacat agtagcctgt gaggtagccc aggatgaaga tgatccagaa 420 gagggccacg ccgcccagca ccttcatggc gatgcccagc ttgcccgtgc acagcctctg 480 ggagateetg eggeagegtg aggeetette tgtgetggae acageeceta ggetgaetee 540 gtecetgetg cegtecteec acctactata gtggaegtgg eteteetggg getgeatget 600 gtggggctgc agcgggaggg gcggggcctt ctcggtgggg agatcaagac aggtggccag 660 getgtggett caeeggagaa eettgeetga gggetgggge etetgggeea ggttgeggte 720 agggcctggc cagcggcccg cacctcccag cggggcaggt cgtgggctga ggtgcggcag 780 acgectegag cetgtgteec egegtetetg ggeteegeag gggeegaatt ceaceacaet 840 842

```
<210> 5882
<211> 808
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (596)...(737)
<223> similar to gi433816 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5882
gggaggtgct cagtcaagcc totgagagga gtgggggggg gggcgaggag totottgctc
                                                                       60
agageceett agggaetggg accegttgae tetgagetge ttttgagget ggateaggta
                                                                      120
ccagcggcct gggggtcgta caggatggga gaggccgggg cttgggatgt tgccagatct
                                                                      180
acgttgaaaa gtgaagcagg aagagggca ctgaggctgg gcacatgggg aaaaccgtgg
                                                                      240
agagccggcc tttggggact agaagagtgg gaacaatggt tgacaaatgg tgagtgtggg
                                                                      300
gtagaacagc agtaacacaa taccaggatc cacagagtgg ccagggccag agtggggaga
                                                                      360
aggaacagga ctctgcagat ggggagggta aggggctggg tggcgtgaag ggtggttgca
                                                                      420
gaattegggg agggeageta geetgtgace caggttecaa gggeactgag gtetgggeea
                                                                      480
ggccgcttgg aggcaccaga gcctcagagg aggggtgggg tagaggaacg gatccagcat
                                                                      540
ggtgtccccc ttggccacca gagggagttt tctaaatttg agcatggctc atcgctgctt
                                                                      600
gaaattctac gtcacagtgt ggcctgcatt gaggagggcc cacacctgtc gctacctcag
                                                                      660
actcacctgc cacctgcctc aagtgcatga gagagaacag gaaaccagaa attgtcagga
                                                                      720
```

tcgaggatta tgggaaaaga gtaaaagcct agctgtcaga tctgaggttc caccaaggag 780 cactgatggg tgcttctcat taggaagg 808 <210> 5883 <211> 704 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (86)...(507) <223> similar to gi200543 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 5883 agogtggtgg aattoocgcg ggtaaggcoc tooctagaco otttatacot actttacott teggaggtea agacacetee tgttgeegee teetegeeca acacacagge geeeceegea 120 cgggtaccaa gcttgactaa cggcctctag gggtgtgtgtg tgggacttga aatcctccct 180 taatgaagte acaeettete egteegette caeeeggteg geecatggea gageeeecat 240 gtagcccagg aatcggcttg gcccttcggg gaggtcagcg tccttactat ccccactctc 300 cagtgcggca cattcgttcc cctaggactc cggccggttg ccggccccag gcggtgcttc 360 tececaceae egeceagete ageteagece ageceagece actetgeeet tagaggeeet 420 tetececaaa gaegeaetee agaagteteg eeetegtgeg getgaggage etgggateee 480 agacctgaac aaggtgagca teeetatatt ttageecaga aagatetgtg tggeteaett 540 gccggcctcg ttctgtcaca cagagtccag atttagcctt gagttttcct agtgaaagac 600 agaccetggt atcactatga cectecteag getttettae ecegecteag aaagcagtga 660 ggtgtctgct ttctcccagg gcttctttag ataggggtct taac 704 <210> 5884 <211> 898 <212> DNA <213> Homo sapiens <220> <221> misc feature <222> (616)...(226) <223> similar to gil59167 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

60

120

agtogggcag cotoccagat ctotgacaac tttacaagct gcaggggaga ccagcgataa

ccctgaaacc ttcccatgta acccccaggg cgctggccag accaagagca gctgccacat

caggetggtg ceageagtee etgeetgeea caetgeeeee ceaceaggee actgaatgag

<400> 5884

```
gcagctggga gaggcaggaa gaggggcttc aggctgaatt cttgatttga cccttcttgg
                                                                      240
cccttttgct tgggagacct ggaactgaag ggcatggaac cccccttgga ccctgtgggc
                                                                      300
aggaaaactg ctccccttgt ccctgcctgg gggtaggaca gataaggctg ctcgtcctgc
                                                                      360
ggeggeeece cageecacet getteetate egttteetge aggatggtge eecetgeate
                                                                      420
coetcaccea tigotcacgg aaggaaaage agacgiggee agectgeate eteigeeete
                                                                      480
cetgageete etggeetgge tggecacage tggeatggae gecateagea ggeteegtge
                                                                      540
aggeggaegg ggeageeece acagecaggg caccetggee eteacteace ageaecettt
                                                                      600
                                                                      660
tgttcttttc ctagcaaaat atgcaaagtg tgaccagtgt ggaaacccaa aggtgagtgg
gttccggctg caagccacca aggcttcagc tttgggggtg ggcagggtgg tctctgcact
                                                                      720
                                                                      780
gettggggtg geaggtetgg tgeeegeeea getgggtttg caaegtgget caaggtggea
                                                                      840
tggatgcctc aggacggccc cttgcttcca gccaagcccc tgcccaggcc tggaggggaa
gagagtetgg gtgggttggg gtgagggaga ggeatetgge ttgagageag tteecagg
                                                                      898
```

```
<210> 5885
<211> 1273
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (395)...(1076)
<223> similar to gi163132 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5885
taaggaggag agaccaaaag ggaggcetga acteteaaae teegaatetg atttteaete
                                                                       60
                                                                      120
teccaggaag getteggaaa teaetgtgga ttgtcaatae aggagteeat aetgaetgaa
                                                                      180
tecetaattt tggeetgtat tetteteet etgtgaacca tettettaga agteaetgaa
                                                                      240
ccaagagtgc cagaaaacca tcccaagact cacacagagt tgttcttcca tagtggatgt
                                                                      300
tttggccact ggacatcaga accacatttt gggtttgaag aatcttctac atgctgagaa
                                                                      360
agtggaactc cagagacact cctgaaattg tcctaagtca aaggagccaa acggtgtacg
                                                                      420
agetecetet etgeegteee etetgagage agecatggee etgagtgatg tegatgtgaa
aaagcagatt aagcacatga tggctttcat tgagcaggaa gccaatgaga aagcagagga
                                                                      480
                                                                      540
aatcgatgcc aaggctgagg aagagtttaa cattgagaaa ggacgcctcg tgcaaaccca
acgactgaag attatggagt attatgagaa aaaggagaag cagatagagc agcagaagaa
                                                                      600
                                                                      660
aatcctgatg tccaccatga ggaatcaggc gaggctgaaa gtcctgagag cccgaaatga
cctcatctca gatttgctca gtgaggcgaa gctgagactc agcaggattg tggaggaccc
                                                                      720
agaggtetae caggggetge tggataaact ggtgetecag ggtetgetee gaetgetgga
                                                                      780
acctgtgatg attgtacgct gccggcccac aagacctcct cctggtggag gctgctgtac
                                                                      840
aaaaagccat ccccgagtac atgacaattt cccagaaaca tgtggaggtc ccagattgat
                                                                      900
aaagaggcat aactggctgt ggaatgcagc tgggaggtgt gggaggtcta cagtggcaat
                                                                      960
cagagaataa aggtttcaaa taccttggaa agccgactgg atctctcagc caagcaaaag
                                                                     1020
                                                                     1080
atgccagaaa tacgaatggc cttgtttggt gctaacacca acagaaagtt ctttatataa
gcctctggga agtgaagcta gtgttgaacc actaaaccat aaaagtttaa gttttttggg
                                                                     1140
gaaaggaaac tagtagtgtt teeteetett tgatgetetg atactgttet gtttttette
                                                                     1200
                                                                     1260
acgaaatacc ctttggatag ctaaagtgtt aactttgaaa taaagcccga aattaatgct
                                                                     1273
cagaaaaaaa aaa
```

```
<210> 5886
<211> 2966
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2967)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (23) ... (2020)
<223> similar to gi1781037 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5886
gaaaagagga cttattgttg tcatggccca tgagatgatt ggaactcaaa ttgttactga
                                                                       60
gaggggggtg gctctgctgg aaagtggaac ggaaaaagtg ctgctaattg atagccggcc
                                                                      120
atttgtggaa tacaatacat cccacatttt ggaagccatt aatatcaact gctccaagct
                                                                      180
tatgaagega aggttgcaac aggacaaagt gttaattaca gageteatee agcatteage
                                                                      240
gaaacataag gttgacattg attgcagtca gaaggttgta gtttacgatc aaagctccca
                                                                      300
agatgttgcc tetetetett cagactgttt teteactgta ettetgggta aactggagaa
                                                                      360
gagetteaac tetgtteace tgettgeagg tgggtttget gagttetete gttgttteec
                                                                      420
tggcctctgt gaaggaaaat ccactctagt ccctacctgc atttctcagc cttgcttacc
                                                                      480
tgttgccaac attgggccaa cccgaattct tcccaatctt tatcttggct gccagcgaga
                                                                      540
tgtcctcaac aaggagctga tgcagcagaa tgggattggt tatgtgttaa atgccagcaa
                                                                      600
tacctgtcca aagcctgact ttatccccga gtctcatttc ctgcgtgtgc ctgtgaatga
                                                                      660
cagcttttgt gagaaaattt tgccgtggtt ggacaaatca gtagatttca ttgagaaagc
                                                                      720
aaaagcetee aatggatgtg ttetagtgea etgtttaget gggateteee geteegeeae
                                                                      780
categotate gectacatea tgaagaggat ggacatgtet ttagatgaag ettacagatt
                                                                      840
tgtgaaagaa aaaagaccta ctatatctcc aaacttcaat tttctgggcc aactcctgga
                                                                      900
ctatgagaag aagattaaga accagactgg agcatcaggg ccaaagagca aactcaagct
                                                                      960
gctgcacctg gagaagccaa atgaacctgt ccctgctgtc tcagagggtg gacagaaaag
                                                                     1020
ègagacgece etcagtecae ectgtgeega etetgetace teagaggeag caggacaaag
                                                                     1080
gcccgtgcat cccgccagcg tgcccagcgt gcccagcgtg cagccgtcgc tgttagagga
                                                                     1140
cagecegetg gtacaggege teagtggget geacetgtee geagacagge tggaagacag
                                                                     1200
caataagctc aagcgttcct tctctctgga tatcaaatca gtttcatatt cagccagcat
                                                                     1260
ggcagcatcc ttacatggct tctcctcatc agaagatgct ttggaatact acaaaccttc
                                                                     1320
cactactetg gatgggacca acaagctatg ccagttetee cetgtteagg aactategga
                                                                     1380
gcagactccc gaaaccagtc ctgataagga ggaagccagc atccccaaga agctgcagac
                                                                     1440
cgccaggcct tcagacagcc agagcaagcg attgcattcg gtcagaacca gcagcagtgg
                                                                     1500
caccgcccag aggtcccttt tatctccact gcatcgaagt gggagcgtgg aggacaatta
                                                                     1560
ccacaccage tteetttteg geettteeae cagecageag caceteaega agtetgetgg
                                                                     1620
cctgggcctt aagggctggc actcggatat cttggcccc cagacctcta ccccttccct
                                                                     1680
gaccagcage tggtattttg ccacagagte etcacactte tactetgeet cagecateta
                                                                     1740
eggaggeagt gecagttact etgeetacag etgeagecag etgeedactt geggagaeca
                                                                     1800
agtctattct gtgcgcaggc ggcagaagcc aagtgacaga gctgactcgc ggcggagctg
                                                                     1860
gcatgaagag agcccctttg aaaagcagtt taaacgcaga agctgccaaa tggaatttgg
                                                                     1920
agagagcatc atgtcagaga acaggtcacg ggaagagctg gggaaagtgg gcagtcagtc
                                                                     1980
tagcttiteg ggeageatgg aaateattga ggteteetga gaagaaagae aettgtgaet
                                                                     2040
tctatagaca atttttttt cttgttcaca aaaaaattcc ctgtaaatct gaaatatata
                                                                     2100
```

```
tatgtacata catatatatt tttggaaaat ggagctatgg tgtaaaagca acaggtggat
                                                                     2160
caacccagtt gttactctct taacatctgc atttgagaga tcagctaata cttctctcaa
                                                                     2220
caaaaatgga agggcagatg ctagaatccc ccctagacgg aggaaaacca ttttattcag
                                                                     2280
tgaattacac atcctcttgt tcttaaaaaa gcaagtgtct ttggtgttgg aggacaaaat
                                                                     2340
                                                                     2400
cccctaccat tttcacgttg tgctactaag agatctcaaa tattagtctt tgtccggacc
                                                                     2460
cttccatagt acaccttagc gctgagactg agccagcttg ggggtcaggt aggtagaccc
tgttagggac agagectagt ggtaaateca agagaaatga teetatecaa agetgattea
                                                                     2520
                                                                     2580
caaacccacg ctcacctgac agccgaggga cacgagcatc actctgctgg acggaccatt
aggggeettg ccaaggteta cettagagea aacceagtae etcagacagg aaagtegggg
                                                                     2640
ctttgaccac taccatatct ggtagcccat tttctaggca ttgtgaatag gtaggtagct
                                                                     2700
agtcacactt ttcagaccaa ttcaaactgt ctatgcacaa aattcccgtg ggcctagatg
                                                                     2760
                                                                     2820
gagataattt tittitictic tcagcittat gaagagaagg gaaacigict aggaticagc
                                                                     2880
tgaaccacca ggaacctggc aacatcacga tttaagctaa ggttgggagg ctaacgagtc
                                                                     2940
tacctccctc tttgtaaatc aaagaattgt ttnaaatggg attgtcaatc ctttaaataa
agatgaactt ggtttcaaaa aaaaaa
                                                                     2966
```

```
<210> 5887
<211> 2408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2409)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2240)...(835)
<223> similar to gi1850772 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5887
                                                                       60
tttttttttt ttcatttage aaagttttta ttcaaaaget teteageace atetagttat
                                                                      120
cagaaagaat ggatatcacc ttttcctgcc cacccaatcc ccagttccac aggcagaagt
                                                                      180
taaacccatt tggctagagt tccccctaat gattatgact gagaccatga taagattttg
gttgttetea eccaactgte tetaageete tacteaaace tgaeteaage agagatgtge
                                                                      240
acaccccaca gttcagaaca ggaaggaatc atgtcagatc tgatcaacct cccattcttg
                                                                      300
                                                                      360
ggctattaga ggcacaagaa attaccttga aaaaatggaa ttcagtgact gccatctagg
aaagacagtg atactgtcca gcagcatgca gttccgagag ctcaactctt aggccaccct
                                                                      420
ccctccactc tactctagga acaaggagca ttaggtctgt tttctctcca tacacctcaa
                                                                      480
                                                                      540
tegetegtee tetegtetta ttaaaacaca gacacagaac caaacttttt gacagttaaa
gacaaacaat tacatctaat taaaatgcta agagatcctg agctgttaga gatgaggaga
                                                                      600
gtagatagta tgacctgatc ttcccccctc ttttttttcc tttaacagta ttctgtttca
                                                                      660
                                                                      720
gcataaagca cactttctga agaggttcct ggtggagact ggaaaatctt ggacttgtgt
cctgtggcaa acaacacaag tccccttgca taactttggc ttcagtccct ggatctgtcc
                                                                      780
                                                                      840
tttgcaaget aegteaggtt eeatggaagg aaggaaagag etggagggea gtateaetea
                                                                      900
gecaaagete ecatggggte ecatgetgge aggacaaatg ggtteeetge teetaacaca
gctagcacct cttccaggga catgcttcct gtcccaccaa ccacttcgta gacatactca
                                                                      960
agagacccaa ctcaatctgt catgcacagg taacctttgg tggccatggt cttcacccca
                                                                     1020
```

```
ttgaaattct ccaactctcc cattttgtga aaagcaccat ccctgaatca tcccggctct
                                                                     1080
gagcacagca gtgaaggtca tggtgtgggt cataacgtga ctcaccaaaa gtcacgcctc
                                                                     1140
                                                                     1200
teegetttat teatgttett caaggagaea eeaaacaeta aeteatggte atagagatte
atgtcactga gggcccagct tgctattgaa agtgttttcc aacatcacag ccaaaccaca
                                                                     1260
cagoogtoto catotttgat ggaggoagoa accatotttt toaggaagto aatgggotgg
                                                                     1320
                                                                     1380
ttgttgtaaa agagtttttc tcccctccaa accatattgc cttaagtatt cccactgtgt
aaagtttgtt gtacttgtgc tggggcctag ggtcattcac taaacaaatc ttatcttcca
                                                                     1500
tattgaagag tggcttgaca tgttncccct gtaaaactcc aagggtgttc atggggccaa
                                                                     1560
ttttctgata atttttatct ttgtctcgat attcccaggt gaatgtctct ggtggattac
                                                                     1620
ctcttcagat gegecaccat tegeaagtat etectecate atgaegteet gtgtggeega
gattteteet tregttgete caergtgtae eaggtteege agtegtatae agaattetet
                                                                     1680
catcttgtga ttcagaatat cattcatcct tctggttgcc tctgttgtat aagattcagg
                                                                     1740
gaagcatttc ttagggataa caccatattt ttcaacaata ttaacaagca tatcccattg
                                                                     1800
                                                                     1860
gccaccatca titgcagggt tcataagcaa aaactgcacc agcctcccat cctcaggctc
                                                                     1920
ctttctctgg gctgtgtcca caaaagcact caagaagaaa taacagcgtt caaccttgtc
ccaaaaaaac aggtaagatt ggctaaactc aaattcttca atatttaact ttttcatgaa
                                                                     1980
tggaageete ataacattea gacaagaaaa gateeageat egeeetgage tettetggtt
                                                                     2040
ggtgattgge ttgeceteet ggggeaegge gtgetggaae acatgetgeg egegetgeae
                                                                     2100
cgtggcccgc ttcagacaga tgtccagcag gtcgtgggtg gtcccgacat tctgggcaag
                                                                     2160
tacgaactgg gggtcggaat tcagtttctg tatcagagca gctaccttct ccgaattcag
                                                                     2220
tecegagetg eteatggege eeacgetgee eggeggggta aeggtagett eeagggteet
                                                                     2280
tgggcgagcg ccgggattgc gctgcggctc gctgcctagg gggcccgacc tgtctctcgc
                                                                     2340
acceggageg ceggaaaaag gaaacegget eggeggegge ggeggeggeg geggegggga
                                                                     2400
ggctgagg.
                                                                     2408
```

```
<210> 5888
<211> 4369
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (4370)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3923) ... (391)
<223> similar to gi532056 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5888
ttttttttt tttaagatag aaatctatgc actttaatga ttgccagaat tgcccagcat
                                                                       60
agetteagta aaatagagaa ttgtetagaa aatacaatet eeaaaatgtg tgeaagtaet
                                                                      120
gcaaaccgga cagaccgggg cagggcaagg cccttgaaac caagtcctcc ttgagcacct
                                                                      180
ttcccaggtt agaaacccct cttcagcctg tgcttcgcac gtttccttca gcgtgccgcc
                                                                      240
catteagact gegecaactt aegteeccag tgeecacgee tgngtggate aagtgteeaa
                                                                      300
cgggaaagta tgagttaggg caagcgcttt ttttttaagc tgtaaacgct tcacatgact
                                                                      360
gggccccgta aggaaattgt ggggagctta ggatgagcct gggagctttt tcagggactt
                                                                      420
ggatgaggac tetgtacaca aatgtgtact ggcagagagt etgcaccage atcattetet
                                                                      480
```

```
gttgccctca gcatgtccag cactctcggg atgtccagca cctcattgtg ttccaggcag
                                                                      540
gegateatga teteegacaa aateaceaeg ceagteette etaeeceage actgeagtgg
                                                                      600
accaacaacg gagggttggg gctttgggga tcacttgtgc tatttgtatg gcgtcgaaca
                                                                      660
gactggatet etteaagata tgataaaaat eeettgaggt ettetggaea geeatgttea
                                                                      720
ggccagtctg tgtattggag gtgccagacg gtcctctctt gcccggtaag gaggtgcttc
                                                                      780
atcttcaggc ctgtggtggc atagcagcca gagtctgtgc ggaaccgggt cgtgatctta
                                                                      840
                                                                      900
aaccttccat aggtgacagt gttgtgcctg gaaccaagtc gtggccagta cctaaagctc
                                                                      960
ttctcccttc caccctcctc ttctgctgtc accattgcta taattgcaat tccctgttcc
                                                                     1020
cataccatct gccaaaaatc ttgacaggta ttctgtaatg gtccctgtgt ggcaatataa
                                                                     1080
toccattoga ttocactgac agagacetta atatgtgatg cgttgätgta accagtgttg
                                                                     1140
ttttctttag ttgggaccaa ctccactctc acatcatcat aaggaagaac atcttggaat
                                                                     1200
cgatttcttt ctgcattttc agggagtcgt gctgttgagc actccccatc aactagccgt
ttcttaagaa ttctttcata ttctgtgaat accattcctt gttctaatcg ttgttccaga
                                                                     1260
attttacacc tttcatcatt cgttgctctg gtagccactt cctttccttc atcaggcaga
                                                                     1320
ggcactcgag atagggagag tccatttagg gcagccagtt taagaggacc aattttttt
                                                                     1380
gcatctactc gagtcttttt cattccccct agaggcggga gcccttccac gatgttcttc
                                                                     1440
ttcccagaga gaaggtccga caccggcctt ttcttcagag agtccctccg ggctcggtag
                                                                     1500
cggcctgacg tggtgaggtc ggactccgac atggagggca tcagcagccc gtctctccag
                                                                     1560
ggccgctggg cctctgcggt cgtgcggacg gggctgctgt ccatcatcct cttctccgcg
                                                                     1620
totgggacgt gggcettggg etccaggatg tgcaggggce eggegageag gaegegaggg
                                                                     1680
cagccaggtg ggtcctgggc caggccgggc cgaggctcgc gcgcacgtgc agggggcgcc
                                                                     1740
cgggccccgc tetectecte gaagteeteg tectecteet cetegetget gtggattage
                                                                     1800-
                                                                     1860
atggtggcgt ccgacaggga cttcttatgg ccgtacctca agccctccgc ctcctccggc
cetteteget gtgteetete ggtgaaaaeg etggggetgg gageeeaeeg agaeggeteg
                                                                     1920
cggcgcccac ctctgccgcc gacgcggata gggtgcgctc cttgagccgc aggccctcca
                                                                     1980
ggecgtgget gageceggee acetegatge tgtteegttt gtgeagetge gegtggegeg
                                                                     2040
cggcggtgag gggctcgctg acctcctgca gcgagtgcgc cacgggcagg ctgtcctcct
                                                                     2100
                                                                     2160
ggaacgtttg caccgagtgg tgcacgcgcc gcgtgatgag gtcggggttg ctgctgctga
                                                                     2220
tgtaaaggtg gegggacagg tetggegtge tgttggeggg cetgggggge gggtagggtg
                                                                     2280
ggggtggccg gtacacctgc gtccgcatga tgttgggaga cgggtagtcc tgcgcctgca
                                                                     2340
gctgcgcatt ggtcagctcc ggcacgctga ccgcgcccac cacgggccgc cgctcggcag
                                                                     2400
ggtaggggta gggagacggg ctgtggaagc tgtagctcag gctgaacggg cagtgtgcgg
ccgctggcga ggggagctgt gcgtgctcgc ggatctcggg ctggctgtag accagcgccg
                                                                     2460
                                                                     2520
cgggcctgct gtaggcgtac gagctgccga tgttgaggtt tcgcagcgag tggctctgcc
gttccgcatg caccaggccc ctgttgagct gcttcatcac agtctcatag tctggggtgg
                                                                     2580
                                                                     2640
ggeggtagga egggggtate aeggegetgt geegatggga egggaggtag teaggeetea
tgacgtcact cocggtgatg ctagggttgg acgacatcgg cgagggctgc aagtagggct
                                                                     2700
                                                                     2760
gaggattatt taaggagttg gtgctgtgtg cactgtagac actggcattt acggatccga
ccgttgaagt caatctgggc tctattcaag cttgtctgaa attgaccata gtatcccttc
                                                                     2820
ctggttgggc acaaagaggt tatcttggga agaagcatat ggttctgtat aatgtccatt
                                                                     2880
                                                                     2940
atagtgcaac tggcggtggg ggaggcatca cgtagggctg gggtttaggc agagacatcc
                                                                     3000
ttgaagaaga cctcctcctg attgggttca ctgtgacagt ctgagtttgc aggttacact
                                                                     3060
ggtttagtct gtaaaacttg tgtcgcgcaa cacagagtct ccaaatgtat tttgctgttt
                                                                     3120
ccatgtcttc agtttgaaat tgaatggtct cctctttatt tgccagctct aatgcaaaaa
                                                                     3180
aggacttgtt gtgggacatg ttggcaatgt catgccacct aaataccaca ggatgccttc
cattettgtg tttcacaaag atacettcaa gacacgetee aatggatatg teactteett
                                                                     3240
ggetateett ageagggtag etetettete catagecate cattetetet aceteetgea
                                                                     3300
                                                                     3360
tgtacagcat ttcagcatca ggagctgtga gccctctgta tttctgatgt agtaaggcca
ctttttgggt tgcttcttcc aatacttttt catcttgtaa ccatcccaca ggaaacaagg
                                                                     3420
caaatttctg aagaaagtcc tgggattcat actgatcaaa gtcaccaaaa atcgcttgaa
                                                                     3480
cagctaagcc tgctaggtga attggctgtt ccaaggtaca agggatacct tcttcccaga
                                                                     3540
                                                                     3600
tateetteet eagttgeaga taataetggt acceggtaat eetetgetgg aagegaggaa
                                                                     3660
cctgaggege ttaaaccccc attccaaaat agacggtagg ttccaatgca tatttatcca
                                                                     3720
getgettett caaaggtttt tecaaateta eccaeeggeg etgattttge ttgttgtagt
                                                                     3780
accagagget gaagtaagtg accteeegea geteeageet etgggeeaeg geetegagge
                                                                     3840
tttcctggcc agtgctctcc acggacaggg tgaactccac aaactcgtta ttaagcagtt
                                                                     3900
ggatccgggc aaccaggcaa ctcttgctgg acaccgtgta gcgccgggtg cgtttcagtt
```

```
tcaacccaaa tggcagtggc atcttcttct ttcttcaaga atggaggagc aaagagggaa
                                                                     3960
                                                                     4020
aagetacece caccaaceca gegetggtga egecaggaga aagegateet eteeggatgg
                                                                     4080
gacgaacact gtccggcctc cagctgctca cccagcagcc gctgccgcca ttaaaaagca
                                                                     4140
acggagtete caatggeeeg aggaagggag cattgaegee agegeactag aagagtggea
                                                                     4200
gttctgaaaa tccagacccc ggcccctctc cagggtgggg acgcccaaac aggccttcac
                                                                     4260
ttaageggag eegeggeeca gaaggggagg egggegaggt etteeaegee ateetgagtt
                                                                     4320
aatgagegge eggaggeaac aaacceaaga ageceaeggg geettggage acteaggeee
cggcttetee cgcgteetee cettgggaag ageacgegge gttacgaaa
                                                                     4369
```

```
<210> 5889
<211> 1976
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (768)...(1303)
<223> similar to gi1843401 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5889 cageetggge gegtecateg tegagtacet teteetetge etececetee etetgettet 60 atctetetee aattgeeete eetggeetge ggeegeeegg teeteettee eageeeagtg 120 cagecaggea ecegggtteg gettgeteag gtetetgtee gggaetggga agecaeggag 180 ggccgggaaa gtggcacact cctggagctc aagcttccta ctctctcatc gctgaataac 240 taccgggcag gactgggtgg aacagacagc atatttaggt cattgatggg ctgctgggtg 300 gatggagetg gaaagtgatg ggeactgett tetggggetg eecaggttee tteegaggge 360 tegettttee tgggeagage gggaaagagg aggggeagge eggtegegaa aegeaaatag 420 480 tegagaatag egateegggg agaageaggt gtetgtgggg eecaagagaa gtaceatete gttaaaaatt cagattgaac tatcttacaa atggctccca gaagatccac tccctgtggg 540 aacacagcag ttgtggaagt gaagacagga ctggacccag aataagggtt caaatatgtg 600 gggaaatctg acctctaaat tcttataagt cagagagtga ctgaacaaca gcagtgagac 660 atcgaagagt tttaatatct gctgtaaacc ttggcacaga tcatttactt ctctaagact 720 gaatccaaaa agcacaatgg aatactataa taagctgaga cagcatggtg aattccagac · 780 aageetgage atteeetata geeagagaag gaggeecaae aeetaaeata geettggatg 840 900 cagaactgat agaacttggg gaaagtgatg aagtagttga cctcacctgt gaatctctag cacctgtagt gattgaccta actcaccgtg actctgtagt gattattgaa caaaggagga 960 ggccaagagc aaacacaagg ccactccaag accacatgg cagttgtgtg gtgaacaatg 1020 atgaggaggg agtgaaaagg gacagagatg tatgtataac caacagtgcc caccataatt 1080 ccctgcaaaa aaattttttt tgtcatatac tacctggtta tattcagtgt caagtttgca 1140 tggatggatg ctcagagatt gaacttagta tacaacacat ctactctata gaatgtggcc 1200 acatotytag teagtgette tyeactteet ttacacatae taacactyce cagtttyttt 1260 gaaaaaaatc agcctccatc agtatcactg cagttatata tgatgtatgc cttattgctc 1320 aagacagatc ctgtggctgg atttttccat gtctttgtgc aggaactatg ggttgttggc 1380 atccaatget etgagettaa aaataetgat ttttaaaaatt getatetgea gtatataaga 1440 aactotttga tttotoatat gototgagao tgotttttgt ttootttggt tttatgotto 1500 agetetggae tteagttgee agagtgtgee agatactggg gtegteetta aageaacttt 1560 ccctttctta tagtcatcaa tttttagttg gccacatgta gacattctgg accacataaa 1620 taaagacaac accctagaga tggtgaagta agttgtaaac taaaatccta agccccctaa 1680 ttgactgaat ggaacccctc ttgaccaaag tgaccccaga aaaaccttaa aactgagttc 1740

```
ctggccatga cgggatggga ggtcagacac gcttcattat atctccgtct cttttatggt
                                                                     1800
ttagacacag caactgacca gcattaatgt caaaataaag atcataaggc tgacagaata
                                                                     1860
qaccetttqt ggcaataaca aattattegt aagatetaag gtcatgecag gcaagtgtta
                                                                     1920
tqtcatqcac tcctacactt taaaggaata aacctatgtt cctaactgcc acaaga
                                                                     1976
     <210> 5890
     <211> 717
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(718)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (423)...(65)
     <223> similar to gi19923 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters \
     <400> 5890
tttcgtcgcg agagcgcgcg gcgcggtgac tcgtcgctga gggactttaa gattgtagag
                                                                       60
gggcgcggag ggtcctcccc ggggcggagg gacacagagg gattctaggg aacctgccgt
                                                                      120
cgcgagtccc gcttcaggcg gagaatctag gcggcggcgg ggcctccctg aggcggagga
                                                                      180
gtcggcaccg gggcctggct gccggggaag gagagcacgg gagcggggac tcctgtgtct
                                                                      240
ggcggaggga cacggcgttc cggtggaggg atctgttcct tgtacctggt ccagggttgc
                                                                      300
ggteggggat ggageggtta ceeegaeeet gegggaeett etteetetgg eggaggtgea
                                                                      360
eggegeggeg tggagttttt etggeggaag tatetgtgeg tggeeceagg ecetteeegg
                                                                      420
cgcggtctca tctggggcca cttgttggcc ctcgcgttgg ggaggttcat gtggtgcatc
                                                                      480
ctgatgagaa ggggggtcac aggggtctcg gggccagggt tcagccagcc aggccccagc
                                                                      540
ttgctctctt ctggtgctgc ccctgtccct gaattcatag acccggcttt ccctctcnnn
                                                                      600
nnnnnnnn nnnnnnnnn ntgegetttg egeatgtage agaggeaaca gtgteacetg
                                                                      660
                                                                      717
ggaagetggt ttcccccaaa ggaactettg tetgteegtt gttgcagage cagegca
     <210> 5891
    <211> 699
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (313)...(51)
```

<223> similar to gi3883128 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<400> 5891 tttcqtatca gttttctcct cctttcttcc cgcgatcgcg cggctctctg gaagccttcc 60 cactctatta ttgccgagga tccccctcct agacactctg agaaggtgcc gctccggcct, 120 tgggtacggc ggtacccgga tgtggagtcg ctctcgcccg gctgggactc tgtggcgggg 180 240 cggagcgcgg cggctggtgc gggggcagag agaagggggc cccgatgagt aactcccgga ataaccgggt gatggtggaa ggggttggcg ctcgggtagt gcgcggcccg gactggaagt 300 360 gggggaagca ggacggcggc gagggccatg tgggcaccgt ccggagcttc gagagccccg aggaggtggt ggtagtgtgg gacaacggca cagctgccaa ctaccgctgc tccggggctt 420 acgacetecg cateetggae agegegeeca eeggtaagee geggeeacet ggeeaggget 480 tgcgcgcgcg gggggaaggg gcgagctgcg gtgggcgtcg gtgtcgcggg gagaggtctg 540 600 cagtgggaca cctggtgggc agcgccggc tggagcgagc ggaaaggcaa agcgccaaag 660 gaattetagg tteegaacgg gtgaacaaac acttteagaa aagaceetet acceecaagg 699 gaaatgatgg cagcaccatc accgggatgc tttcaagcc

```
<210> 5892
<211> 1967
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1858)...(782)
<223> similar to gi3875351 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5892
ttttaaatca atagataaac atgatttatt actttgtcta ttaaagtagt ttcaacacaa
                                                                       60
ttgaagttta gactgcactg ggctgttccc atcacagtcc aggattatgc acagaccagc
                                                                      120
                                                                      180
ccccaaccc agcaggggtg ccctgccaga acctgtgctg gatgcctagg agcacagaga
                                                                      240
ccactgooog ttgttgggot gogtgtgoac aattcatacc cogatocata atccctaaga
                                                                      300
caagaatggc tgtcattgcc ctgggttcac tttctattca aagaggactc atttgggcac
                                                                      360
agccaatgta gtagttaaaa tgcattttga gaaaaaataa atattctgta caatgtattt
                                                                      420
acaaggatca aatgttttgt aacccaccc caattagttt cccaattggg aaactataat
ttgataatta agaagccata ttattggccg ttagtgtcac gtcaacaaag aatgtggagc
                                                                      480
                                                                      540
tgaccaccta aagtattttt gaactatata tatagagaga gagagagtac gcaaaatttc
                                                                      600
acattttaat atgettagaa ggagttttta aagaagtaga aatgatttee ttggeetetg
                                                                      660
actiticaging atgaaaatgc aaccathcan tececeetti geagaaggge agticities
                                                                      720
aggetttetg gaageagggg etteegagga gteteeacce aceteacaga acaeteacta
                                                                      780
tgagecetge acagacagea ggatteacaa tetecaatag ggatggeagg ggeagecett
                                                                      840
aaaacttgaa gaggtcgatg aagtgctgcg gagacacagg cgtgaagcag ctgtcagggt
                                                                      900
eggeegeegt geaggggtgt cetgagteet tecaaaagag aatgetgeag tgeegaeaga
                                                                      960
aatgcagtgt gtctccgtac tgctccttcg ctgggtaatg tttctgaagt gcaaagtaca
                                                                     1020
tcaacttcca ttcaatatga cctttttctg aaaggatcaa atgtctacaa aactgctttt
                                                                     1080
cagcaaaatg gtactgacaa agcttcttcc acagctgtct gtcttcacta agcatataca
                                                                     1140
acgtgggggt cacctggcct aaggtgatga tgtcccatcc gtctgagaac cggtatagga
tgttgttcag catgtgcaga ggaaggtcac tgagggtgag gccattgttc acttgcttag
                                                                     1200
tcatctgaag atcctgtagc tgttgttgcc aggcgagaat agtttctaat cggcaaatcc
                                                                     1260
```

```
aaatattgat gtttcccact aatacagact tccctactcc tctaataaga atgcagaggg
                                                                     1320
tagagettag gtettgeaga agatetttga ttaagegagg attgtggtgg teatcaagaa
                                                                     1380
ccttttgaac gattttatcc aaaatgttga agtaattctt ctgtgccacg ccactcaatg
                                                                     1440
aagttaactg ggattttgca attagctgca acagtttgac cacataattg aaccttcgga
                                                                     1500
tatcttgaat tgcacttgag aagtctaacc gattaaaggc ttctcccaag gtgcaatagc
                                                                     1560
catgcctttc ctttgtgctt tctttatgga catagatcca tttttcacga taaaaacttt
                                                                     1620
gagtatttgt gtcatttcta aaatggtcct ttttcctttt tttcgatgca tattcatgct
                                                                     1680
                                                                     1740
cttcattatt gaatatttct ccatcttcac tatttaagat aatgctgtga ctgatgttac
aatggttatt etetettea agtttetgae tacaagatte acatetette cagecatett
                                                                     1800
ctgtcttaat ccaactccat ccaggagatc tccagtcctg acccaaaaat ggcatagttc
                                                                     1860
tectagegeg cetgeggece ceagtettea cetgaegege cegegteece cagtgeceaa
                                                                     1920
                                                                     1967
cgggcgcgcc ggccacctgg gcccgcacct gacggcgacc aggcggt
```

```
<210> 5893
<211> 1086
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (786)...(360)
<223> similar to gi4033606 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5893
aatacactgc tggggtggca atctgccaag ggcccgaggg caacactcct ttacataaag
                                                                       60
tgaaaaagat ggcaaccaca cttctgctga atacagaggt ggagcatagg gtaatgcaag
                                                                      120
tccaaacaag cttcttgctg ggctggctcc ccagtcttgc ttagagaatg tgagctgccc
                                                                      180
ttctgtgctg cgttcagcct gaccacccct gctctgcact aataatgaat aagcttcgtc
                                                                      240
                                                                      300
cctatctttc cctagcctgg caggccattg taaaacttta tgcataagag tcacacttta
                                                                      360
gattttgtac cctacacact tccactgaag cagaaataca aaagccacaa taatctcaat
                                                                      420
agccagcagg cattectett tagggactgt aaggtggtgg ettttcaaaa ggtggatagt
                                                                      480
agggtggaga gtaacggggc ggtgcacttg aggaccacat gtagctgggt gagggagagg
                                                                      540
cagactgggg ctcatcagaa agtccagagg gaggggagga tggaaagaca ccggaatgct
                                                                      600
gaaagtcata agcagaatat ggtggcaggt gaggagggct atggtagtag gtattgtagg
                                                                      660
atgccacttg gggatgagca tagtaagaaa ctgttggatg ggtattttca acagaacagt
tcagtgctgg gagagttggg ttcatgtcct taaagcctcc aaggacagcg gcagtgatga
                                                                      720
                                                                      780
tgcccaggaa caggccaaca atgttgagga tggtggcaga ccagagcagg tggtagaggt
ggatgatate ttggcaactg ctgacatega tgtattegta gtacceacea gtgateteca
                                                                      840
                                                                      900
cccggttgcc acagttgtag aggtcacagc agaagcaggt gttgccccgg atgcgaggtg
tgcagaattc acggctgagg tgagggcagt taacctctct agctgcctgg gtaaggttcc
                                                                      960
tcataaccct cgtggaagga gaatttttgg ttgaggaact tatgacctcc tcagcttcct
                                                                     1020
totgtgatgt ottgggaaca taatggcacc gggtagcgta gagtggtttc agatcaatgt
                                                                     1080
                                                                     1086
gtctgg
```

```
<211> 675
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (169)...(502)
<223> similar to gi168455 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5894
gacctacacc egetegeget ecetecacte ecagacceeg geetaacace egetegeget
                                                                       60
geotecacte ceagaceceg geotaacace egetegeget ecétecacte ceagaceceg
                                                                      120
                                                                      180
tectaacace, egetegeget cectecacte ceagaceceg tectaacace egetegeget
                                                                      240
ccetccacte ccagaccecg tectaacace cgetegeact eceteegete ccaggeeegg
cetaacacec getegeecca gacecegtee taacacecege teacactece tecactecea
                                                                      300
                                                                      360
ggcccatgc atgccttggg agcccagccc ttctcgtggg gcagatctca gcactcacca
ggegectgee teteceacet agtgggeeet tteetgactg caetgeeeaa caggageete
                                                                      420
cagggeette eegetgeett tgtggetgee agagteeteg teeeettget ttgteteetg
                                                                      480
ctqtctccct ccactcccaa acctttacct atgggtgtga tttcatcccc aggagggaag
                                                                      540
caccagggaa gcacatagcc caagtgtcat ggagcccagg cctcaggtcc cgtatggagc
                                                                      600
                                                                      660
etgtgeteag gaetgeagag geagtgegtg gecacettge egtggageag geetgggete
                                                                      675
cccgggtgag gtcct
```

```
<210> 5895
<211> 2000
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (358)...(1389)
<223> similar to gi3878668 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5895
cgggctgggg gaggggagcg tggggccgac agttttgggg gtgaaaaggc aaaaggcggg
                                                                       60
tgaaaggetg cetecegaga eteteettge ttggaattet geceactetg eggagttage
                                                                      120
                                                                      180
agteacgace tecageacag gatgtggtae cacagattgt eccacetaca cageaggett
caggacttgc tgaagggagg agtcatatat ccggcccttc cacagcccaa cttcaaaagc
                                                                      240
ttacttcctt tagctgtcca ttggcaccat acagcctcca agtctctgac ttgtgcttgg
                                                                      300
                                                                      360
cagcaacatg aagatcattt tgagctgaaa tatgctaata ccgtgatgcg ctttgattac
qtctqqcttc qaqaccactq ccqctcaqca tcqtqctaca actctaaqac tcaccaqcqc
                                                                      420
agcctggata ctgccagtgt ggatttatgt atcaagccaa agaccattcg tctggatgag
                                                                      480
                                                                      540
accacactet ttttcacttg gecagatggt catgtgacta aatatgattt gaattggetg
gtgaaaaaca qctatqaaqq qcaqaaacaa aaaqtcatcc agcctagaat actatggaat
                                                                      600
gctgaaatct accagcaagc ccaagttcca tcggtagatt gccagagctt cttagaaacc
                                                                      660
```

```
aacgagggac tgaagaagtt tctgcaaaac tttctgctct atggaattgc attcgtagaa
                                                                      720
aatgtccctc ccactcaaga gcacacagag aagttggcag aaaggatcag cttaatcaga
                                                                      780
gaaaccattt atgggaggat gtggtatttc acttcagact tctccagagg tgacactgcg
                                                                      840
tacaccaage tagetetgga teggeacact gacactacet attttcaaga geeetgtgge
                                                                      900
attcaagtgt ttcattgtct taaacatgaa ggaactggtg gcaggacact gctagtagat
                                                                      960
ggattetatg cagcagaaca ggtactteaa aaggeacetg aggaatttga acteeteagt
                                                                     1020
aaaagtgcca ttgaagcatg aatatattga agatgttgga gaatgtcacc aaccacatga
                                                                     1080
                                                                     1140
ttgggattgg gcccagtctt aaatatctac ccatggaata aagagctgta tttgatcagg
tacaacaact atgaccgggc tgtcatcaat accgttcctt atgatgtcgt ccatcgctgg
                                                                     1200
tatacagcac accggactct aacgatagag ttgaggagac ctgagaatga gttttgggtc
                                                                     1260
                                                                     1320
aaactaaagc ctggcagggt cctatttata gacaactggc gtgtcctaca tggcagggaa
tgcttcactg gctaccgcca actgtgtggc tgctatttaa caagagatga tgtattaaac
                                                                     1380
actgctcgcc tcttggggct tcaggcttaa aattgacagc atctggatta tgaatacacc
                                                                     1440
tggcaccctg gctaccagaa tttcatatgg gcagaataat attgtgtcaa actctacttc
                                                                     1500
agattgtctc cttatcccat cccacaaaac agaatctgtc cgtttctcta gtaagggaga
                                                                     1560
cttgttggag aggcgggact ctgagttatc taatgtcaga catctagtgg ggcagctctc
                                                                     1620
ttcctcatgt tataacatgg atccacttgt tttatttaaa ccttttaata taattttggt
                                                                     1680
cagteteett cagaaatata ateteeatat tgataggaaa geaataattg eeatgaggta
                                                                     1740
                                                                     1800
acgatttttt tcccaagtag atcagttaga aagaaatgca ttctagaaat aacaaaaatc
ctgataaagc aacaatttgc aaaatgtttg gtcttaggac accttaacac tcttaaaagt
                                                                     1860
tattgaaggc cccaaggagt tcttgggtgt gggttctatc tattgatact aactatttta
                                                                     1920
                                                                     1980
qqtattaaga ctgagaaata aataaagctc aagaagaaca cagaagccct gtattgcggc
                                                                     2000
cgggcagagg ataccagcag
```

```
<210> 5896
<211> 3775
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2313)...(1507)
<223> similar to gi5542020 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5896
                                                                      .60
aaatqtqaat tttatqaact aaataaatat ttggaaaatt agcgtgcttt aaaagggcaa
                                                                      120
ttttggtttc attaatactg tatactttta ctgctttaag atgttaagag agtaatcctg
ggaaaataaa acacatacaa ctttcaaaaa agacaggtgg tgtatgccct aatatttaaa
                                                                      180
ttgctcatta aaggaagtgg atacaagcat taagatgaat catagcttca gtcaagaggc
                                                                      240
                                                                      300
tccacatata taggetgeec eggeteecte tectaaatea tagacategt atgtagtace
accttctacc aatttgattt tagaattagt aactgacaca aagcattcta ggacagacgc
                                                                      360
                                                                      420
catactatta teteceacat tgacatttat taataacatt tetggcaaaa acaagtaaca
agttcaataa ctgaattcac atcaacaggt ttcattttga tccattagcc aatttggaaa
                                                                      480
                                                                      540
aaagccatat tgatcaaagg gattaaaatt aaaaagcacc ttttccttgc tacatataga
                                                                      600
ttctttaaac taaaactcca agcagggatc agatacaaaa cccaactgca ggattgtttt
tattgactat gacatggact tgttgcttac atttttttaa agtcatcatt tatacagtta
                                                                      660
tttaaactct attgggcaga aaactgaaaa tacaattgtg agaattatac tccatagtaa
                                                                      720
                                                                      780
atacctatgt acttaatact gaattettgt gteactgaga acettaacce tactetaaga
                                                                      840
catcttgcga taacctgcaa ctatcaattt tttggagaca tttttggtat ttcggtcaag
```

tgctgaaggg	gttttactcc	aaaatctagg	gctagaattc	agcttccaac	actctcatac	900
	caattatgaa					960
agctatgcct	gataaatgac	atttgaaaaa	taataatata	gaaataatta	gctgaattta	1020
tactcctgaa	gccacttcat	ctttaggctt	tatatttaca	gtgttgtcca	ggaggaacta	1080
aagaaaaaag	ttacactaat	tatttgtcaa	gctctattcc	agatgtctgc	ttaagacttg	1140
	agaggtgaac					1200
ctaatagtaa	aatacatcaa	cccaaatctt	atgaaggcag	cacatcttta	ggagtaacta	1260
gtatataaaa	agtatcaaca	tcagtggttt	gaatataaaa	atttatttt	aagtcaaagt	1320
atgcaacaaa	taaacctaca	gaaaacattt	tcccatcaca	atctgttgct	ttaccaaata	1380
	aacacattcc					1440
_	aagtctagta					1500
	catcccacgc					1560
	accaccacgg					1620
	ccccattccc					1680
	gtagcctccc					1740
	gagttcaata					1800
	ttcatgtgtc					1860
	ccaatatcaa					1920
	tttcagttgc					1980
	aacttgcatc					2040
	tgtcatcaaa					2100
	cctccataac					2160
	cgcccagctc		and the second s		_	2220
	tgtcccagca					2280
	aagatctcaa					2340
	agtgtaaatt					2400
	aatttaaatt					2460
	atttaagttt					2520
	gtctctttta					2580
	tcaacaacat					2640
· ·	ttccccaccc					2700
	taccccagaa			-		2760
	aaaataaaaa					2820
·	tgtgtttccc	k.				2880
	ctgtgcttct					2940
	ctttaaccca					3000
	catctgaatc		•			3060
	cttagtttcc					3120
	ataaatttt					3180
	atattacatg					3240
	atttcatcac					3300
	attctgtatt					3360
	gttaaactta					3420
	caaatataaa					3480
	tgaactattt					3540
tgtcccatca	ctagcgtcat	ttggaccatt	atgtttcata	acccaatcca	tctcaatacc	3600
gtttgattta	aatgcccctt	ttacttcaga	taccctgtca	ggcgatagtt	acgccgactc	3660.
tggtgctcgc	ggggtccagt	tcaaagaagg	gagaagtcgt	ttgcctcgtg	tagcgctcgc	3720
cacaacggtt	ctcccaaccg	tctccagcgg	tgacaaccgc	ttagggagca	cgaaa	3775
			•			

<210> 5897

<211> 595 <212> DNA

```
<220>
     <221> misc feature
     <222> (105)...(482)
     <223> similar to gi1345531 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5897
tttttttttt ttcattttct ccattttatt tqtcaatata aaaatactca aatatttaca
                                                                        60
acaaataaat acgcggggac acaataagtt acactgttag gagccctcct cctagggctg
                                                                       120
gaagagagta tgccattgtc cacagcaggc ccaccetete cettetete ceteacacag
                                                                       180
cettteccag ceetgtacag gaagaaggea agtataaaat accaetgaac eeeggggeea
                                                                       240
agtgggagge cecacecace ettecececa aacacacagg aggetecate tecetecece
                                                                       300
caccetgaaa acatteacag ceetaggage aggattagge ceaccecaag ceetgeacte
                                                                       360
cctctgaagg ggcacagcac cctgtccacc ccacctccat atgtacatcg ctgcccgaca
                                                                       420
ctcggggcag tgggggtagg agagacaaag tgatacgacc ccttcccctt catagctcca
                                                                       480
atgactcatc aggaggacac atgccatggg aagatttgac ggagaaagga aggctatgca
                                                                      540
cgtacgagca ggtgacatgt acgcaactat aagcacacag aaacccatgt gcaat
                                                                       595
     <210> 5898
     <211> 2921
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(2922)
     \langle 223 \rangle n = a,t,c or g
     <220>
     <221> misc feature
     <222> (358)...(2122)
     <223> similar to gi5912193 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5898
gtggccatag agcagacate tettaagatg atgcaggcag taggaggtgc acetgcacgt
                                                                        60
cccactggag aatatatctg taatcaatgt ggtgctaagt acacatccct agacagcttt
                                                                       120
cagactcacc taaaaactca tctcgacact gtgcttccaa aattgacctg tcctcagtgc
                                                                       180
aacaaggaat teeccaacea agaateettg etgaageatg ttaccattea etttatgate
                                                                       240
acttcaacgt attacatetg tgagagttgt gacaagcaat tcacatcagt ggatgacett
                                                                       300
cagaaacacc tgctggacat gcacaccttt gtcttctttc gctgcaccct ctgccaggaa
                                                                       360
gtttttgact caaaagtete catteagete caettggget gtgaageaca gtaacgaaaa
                                                                       420
gaaagtetat aggtgeacat ettgeaactg ggaetteege aacgaaactg aettgeaget
                                                                       480
ccatgtgaaa cacaaccacc tggaaaacca agggaaagtg cataagtgca ttttctgcgg
                                                                       540
tgagteettt ggeaeegagg tggagetgea atgeeaeate aceaeteaea gtaagaagta
                                                                       600
```

<213> Homo sapiens

```
caactgcaag ttctgtagca aagcettcca tgcgatcatt ttgttagaaa aacacttgcg
                                                                      660
agaaaaacac tgtgtattcg aaaccaagac acccaactgt ggaacaaatg gagcttccga
                                                                      720
                                                                      780
gcaagtgcag aaagaggaag tggagctgca gactttgctg accaacagcc aggagtccca
caacagtcac gatgggagcg aagaagacgt tgacacctct gagcctatgt acggctgcga
                                                                      840
catttgtggg gcagcctaca ctatggaaac tttgctgcag aatcaccagc tccgagacca
                                                                      900
caacatcaga cctggagaaa gtgccatcgt gaaaaagaaa gctgagctca ttaaagggaa
                                                                      960
ttacaagtgc aacgtgtgct ctcgaacctt cttctccgaa aatggcctcc gggaacatat
                                                                     1020
gcagacccac ctaggccctg tcaaacacta catgtgccct atttgcggag agcggtttcc
                                                                     1080
ctccctttta actcttactg aacacaaagt cacgcatagt aagagtcttg atactggaaa
                                                                     1140
ctgccggatt tgcaagatgc ctctccagag tgaagaggag tttttagagc attgccaaat
                                                                     1200
gcaccctgac ttgaggaatt ccctgacagg ctttcgctgc gtggtgtgca tgcagacagt
                                                                     1260
                                                                     1320
gacctccacc ttggaactca aaatccatgg gacgttccac atgcaaaaga cagggaatgg
gtctgcagtt cagaccacag ggcggggcca gcacgtccaa aaactgtata agtgcgcatc
                                                                     1380
ttgcctcaaa gaattccgtt ccaagcaaga tctggtgaaa cttgatatca atggcctgcc
                                                                     1440
atatggtetg tgtgeegget gegtgaatet cagtaagage gecageecag geattaaegt
                                                                     1500
ccctcccggc acgaatagac caggettggg ccagaatgag aatctgagtg ccattgaggg
                                                                     1560
gaaaggcaag gtggggggac tgaagacacg ctgctcttag cttgcaacgt ttaagttttg
                                                                     1620
agtettgaaa gitgaaette cagaaccaca teecaaacca ttecacegag gagtitettg
                                                                     1680
nccagacage aacagcacae agttgaaaac geeecaagta teaccaatge eeagaateag
                                                                     1740
teceteceag teggatgaga agaagaeeta teaatgeate aagtgteaga tggtttteta
                                                                     1800
caatgaatgg gatattcagg ttcatgttgc aaatcacatg attgatgaag gactgaacca
                                                                     1860
tgaatgcaaa ctctgcagcc agacctttga ctctcctgcc aaactccagt gccacctgat
                                                                     1920
agagcacage ttegaaggga tgggaggeae etteaagtgt eeagtetget ttacagtatt
                                                                     1980
tgttcaagca aacaagttgc agcagcatat tttctctgcc catggacaag aagacaagat
                                                                     2040
                                                                     2100
ctatgactgt acacaatgtc cacagaagtt tttcttccaa acagagctgc agaatcatac
                                                                     2160
aatgacccaa cacagcagtt agtgcaagta cagtctctca aggagaattg attttgtggc
                                                                     2220
acaaaaaggg aacatgtttt actetttgea egaaaettte attgttaatg tatattatte
agaaacattg tattgtacca taaaacttgt attatcaaac tgttggatgt tcatgtgttt
                                                                     2280
gaacttttgc gcaccggata gaccccttgt atataaagtg ttgcacatgt attatgtcgt
                                                                     2340
ctgatactaa aatggtotta taaagacaag tggacttggg coctattcag gcaagattaa
                                                                     2400
aaaaaaaaaa aagactttga ccaaaatggc ttaaaataaa gtatttttaa ggaaaaaaaga
                                                                     2460
ttaaaaacaa ctgttataca tgagactatg gttggacttc cttttcttta cacttaagcc
                                                                     2520
tagaatttet etttaggtat ateagegett aaateeaaga etattttta ttgetgaaga
                                                                     2580
ttottgoada coatgaagag atgttotoac agaacagaac cocacagotg gataaggooc
                                                                     2640
gtatatatat atttgtaagc cttgcaatgt gacaggtagc atcactatat atgcaatagt
                                                                     2700
tgttatgtag actgtcaaag aatttttttt tecetggata catttgaage tttgagtgtt
                                                                     2760
caaggittic citaatgatt tcacgcagcc aaattctiga atcagtigaa ctaaccigta
                                                                     2820
tgttactgtt attaatgttt actctgcagt ctgaacctgg agattactgg aattgttttc
                                                                     2880
caagaggaaa taaattcagt ttaccattag gaaaaaaaa a
                                                                     2921
```

```
<210> 5899
<211> 2119
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1321)...(690)
<223> similar to gi310200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5899
tttttttttt ttgcaggttt agaaaataaa gtttgttggg atcttaaaca ttttggataa
                                                                       60
                                                                      120
aactaacaaa aaaatatgaa cacacattca ggttgtggtg ctatgaggag tagcgtcatc
ttatttagtt cettgagata caegeaegge tgeteggtga teggtgeege eetgggaaag
                                                                      180
gttggtcagg aggtgacagg ggtctccagg aggagctcgg gaggtgacaa gggtctccag
                                                                      240
gagggagcag gggctgctcg gccaggctgc cctggagctt gaggataagg tcaaggttgg
                                                                      300
tatgtgttgc tccgacttga gaatgaatta ggtgtgtgac tgtgtggcat cgtgaacatc
                                                                      360
agtagtgacg cagccgtggc ctgggctttg cctgcagcgc acttaggtta cacggagcgg
                                                                      420
                                                                      480
gatcagaage aagegatteg geacacagge gtttggeeac ageaattagg aaatacatat
tctgcggcag ggacacgatc atattttggt gtgaagaaga gggcaagaga agcagaagga
                                                                      540
gaatgggtcg gtaggtgtga aaagtgtttg gcatgcatgg gattaaacag aaaaggtgtg
                                                                      600
                                                                      660
gctgagattt cccagtggtg ctcacagtgc atggacagcg cggggtgggg cacggcgggc
ttcacacagt totgtccgtc cotgagtgct tootcaccac ottgcctccg ttcacctggt
                                                                      720
                                                                      780
cgaccgccag ggtcttcacc tcgggctggg cctgcggcgg ggtggcgtgg tggatccgat
                                                                      840
gtgccacccc gacgtgggcc ttgtgcggct tttcgcgggc cgggctgtgc tgctcgccgc
ttcggtcgga ggcgatgggg gggatgacga ggggcctctc tttgatgagg tggacctcgg
                                                                      900
                                                                      960
cggactccct agccagcaga aatggggtgg ggtcgggcat agcatccact ggttcccgca
aaaggagttt cotgetetet geecegaate tgtagacete tteaaattee gggtgeaagg
                                                                     1020
gggctgagag gctctttttc atgcggcggc gaggcgtttc gggtagcttg tctttggggg
                                                                     1080
gegetggett gtagetggee ageaegggge teeetgaegg getggeatet gaggteeege
                                                                     1140
tggagctcat gagcttcttc ttggcggcgt gcagctggga ggtcaggtag gcgatggtgc
                                                                     1200
                                                                     1260
tggcccgctg ctccagctcg ctagacagca gggtcagctt gtgactcttg gccttcagct
cetecaggta ettettetet egeteettga tggtgttete cageactgtg ateategegt
                                                                     1320
ttttctgctc cagttctttc aacaactcag cattttcgtt ctctttcact ttcagttggg
                                                                     1380
cttccagctc ttcacatctt ttctttaatt cactgctttt agaagtcccg tctcctgtct
                                                                     1440
gttccgaact tttgactgtc agctcatatg ttaaatctgt gcagtgctgc tgcagccgcc
                                                                     1500
tgatctcgga gtgcagcccc ttgagcgtgc tggcatgctc ccgctgaagg aacaggaggt
                                                                     1560
                                                                     1620
tettetgtge getgtgeage tggtteteca ggtttgtgge tgccatgetg acatecagag
gacetteate gtaactegag aaatgtggtg aagteatggg tetttetgga aaagetacea
                                                                     1680
                                                                     1740
gagtaattca agacgcttgt acagcactga aaaatactga ggatgaaatg tgagttattt
                                                                     1800
gcttataaat tattattgta aatacagaac ctcagaatgc attttcccta atttgctatt
ccagagaacc ctccgtaaag gaggtacaac ttctcaatgg ctcccaggac gcagcccatt
                                                                     1860
                                                                     1920
tgtaggatgc cacagtggaa ccgttttgga gacactgaca cacccaggct gtcactgctt
cagacgacac caattgctca tcaattatct gtacgaccag tgacatgcat gcacactagc
                                                                     1980
                                                                      2040
tetggageta ggacgagtte ataacgaact teagacatae acttteatea cacgaaaaca
                                                                      2100
cttcctgggc gctgctccgg tggaaagcca cagactccac tccgagggca acctgagaac
                                                                      2119
gcagagaagg aaataaaac
```

```
<210> 5900
<211> 1781
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (273)...(544)

<223> similar to gi2664281 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5900
teeggtegae gatttegteg ceattttega gtgatgeetg ateteateaa tetageggga
                                                                      60
gagacaggat aacctgtccg agagtatagc gccactatga ctccgccgga aaaattactt
                                                                      120
taaaaatcgc caaaaattac ttggagcaaa gggcagtcgg cggagcttcg ccaaggctgg
                                                                      180
cgcagtcggt tttgacctgt agcagagaac caattctgga gaacagcctc acttctttga
                                                                      240
ttgaatactt acataatgca ttggaacatg acatgagatt aaggtttaat aatgatagaa
                                                                      300
tgaagaccac aataaaagag acctctactt agctcagcaa ttcttacctt gtttttccct
                                                                      360
tgatgtgaag tcttacctat ttgatgaaga tgtcttttga aaggtgtact gcaaggaaca
                                                                      420
                                                                      480
aaatgtttgt aaattctcct tttaccaagg tggataatta ctgtaccttc ctccatggaa
                                                                      540
aaagttttat ttaaagtgtt atttctcatt gaatactatc aaaaaggaaa aaaaaatgac
ctaaactttt gagatagatt tägetetagt aagtatttag ttatateaet tgeatatetg
                                                                      600
ggagaagaaa taagagacta tcatcagtac attcccatct actaaaaaaa tttattttac
                                                                      660
                                                                      720
acatgicaag ggattactta taacticcat titattacta atagcitgaa cccttitaat
gaagacctaa ctcctccacc agaaatttaa gtttatgttc ttactttgtt tacttataaa
                                                                      780
atacatetea ggtatttegg atgtettttt tttttetaag eetatatgaa atgaaaaata
                                                                      840
                                                                      900
tattggcaaa gtaaatgttt aaacctttta cgttaaaatt actttgaaag atgaaaagtt
                                                                      960
agtgctgttt ttgtcacgtt atactgaaat taaatgttta taatttatat tttgggttta
tgtataaatc atggaattta tgcaaaaata tgagtagtac agattctcct ctaattctgt
                                                                     1020
aggactttga ataatgtgat atttttctta taattggacc cttgtgtttt gaagaaatgc
                                                                     1080
caactgettg aagaatetee tigttatitg tattatitge tatagggtta gatgitgaga
                                                                     1140
aattotgotg acaaaaaatt ttaagocagt tttacactaa atgttootca gtotgattaa
                                                                     1200
tttgttattg gatgtattct gtatctttct tttgtaattt gtgactttta tccacttagc
                                                                     1260
acgaatgatt ctattaaaga aaatcattag gaagtggtag aaactttaaa tcgccccaga
                                                                     1320
gtttgcctgt ttccatattt tattatctta taatcttcgg gagtgcttac acttatggag
                                                                     1380
                                                                     1440
ctaacatttt cagagataca gcttcttata gtaacactaa aactttcttc ctctttggac
tgaataccta taattataac tatatggtag tttaagtttc cttgtgatta gtcaaaaata
                                                                     1500
                                                                     1560
ccattttagt atgaagcaat gaagtctatt atttgttgtc ccataattga gaaagcttaa
atacaccttt tattaagagt ttgtaaattc tagcttagtc tacacagatt tttatatcaa
                                                                     1620
                                                                     1680
tttgtttata tttttattaa tgtcatttct ggaagtgtga aaatgttaat gttcaacaag
caacattaaa aatagatttg aaacatttat atatagagag gtacacattt atttactgtt
                                                                     1740
                                                                     1781
taggtactga agattatcac ttaataaaaa atatatatcc c
```

```
<210> 5901
<211> 2876
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (403)...(2758)
<223> similar to gi5679576 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5901
tttcgtctga cacgcacgac tcccccgcg gcaactgcac gggttcggtg acagccgaga 60
cgccgagtgt ttcccgcagc cggccggggt ccaggtcgga aatgtagcca gtggggccgc 120
cagcatccag cacagtgagc ggcccctggg caccaccaga aaacatttgt gggtgaacgt 180
ggagtgatga ccatgtggac actgtctttc cagggtttct tggagcctct gcagagtctg 240
ggggccaggc ttcttagtgg aaactgcagg atcttccttc tgacccctgc ttgcctcgcc 300
ccagcagctc cggttgagtc cacagatgcc agctcagctt ccagcttggg gaagagtggg 360
```

```
gttgtcagca ggagagcctg agggctgagg cccagcgtga acatggcagc taatggggac
                                                                    420
tetececcat ggteceegge eetggetgea gagggaegtg geageteatg tgageattga
                                                                    480
gtcgttgcag gcttcagtgt catttgagga cgtgactgtg gacttcagca aggaggagtg
                                                                    540
                                                                    600
geageacttg gaccetgece agagaegeet gtactgggat, gtgacaetag agaactacag
ccacctgctc tcagtggggt accaaattcc caagtcagag gctgccttca agttggagca
                                                                    660
aggagagggg ccatggatgc tggaggggga agccccacat cagagctgtt caggtgaggc
                                                                    720
tattgggaaa atgcagcaac agggaattcc tggaggaatt ttcttccact gtgagagatt
                                                                    780
tgatcaaccc ataggagaag attcattatg ttctatttta gaagaactgt ggcaagataa
                                                                    840
tgaccagcta gagcaacgtc aggaaaacca gaataacctt ttaagtcatg tgaaagtatt
                                                                    900
                                                                    960
gattaaggag aggggctatg aacataaaaa cattgaaaaa ataattcatg tgactaccaa
gettgtteet teaattaaaa gaeteeataa etgtgacaca attttgaage ataetttaaa
                                                                   1020
ctcacataat cataatagaa acagtgcaac aaagaacctt ggcaagattt ttggaaatgg
                                                                   1080
taacaatttc ccccatagcc cttcctctac taagaatgag aatgctaaaa caggagcaaa
                                                                   1140
ttoctgigaa catgaccact atgaaaaaca totcagocac aaacaagoto ccacccacca
                                                                   1200
tcagaaaatt catcctgagg agaagcttta tgtgtgtact gaatgtgtaa tgggcttcac
                                                                   1260
tcagaagtca catctgtttg agcatcagag aattcatgct ggagaaaagt cccgtgaatg
                                                                   1320
tgacaaaagc aacaaagtct teeeccagaa acceeaggtt gatgtacate caagtgttta
                                                                   1380
1440
cctcattaca catcaaaaaa ttcataccgg gcagaaaccc tacaaatgca gtgaatgtgg
                                                                   1500
aaaagccttt ttccagagat cagacctctt tagacatctg agaattcata caggagaaaa
                                                                   1560
accttatgaa tgcagtgaat gtggaaaagg cttctcccag aactcagacc tcagtataca
                                                                    1620
tcagaaaact cataccggag agaaacacta tgaatgcaat gaatgtggga aggctttcac
                                                                   1680
aagaaaatca gcactcagga tgcatcagag aatccacacg ggagagaaac cttatgtatg
                                                                   1740
cgctgactgt gggaaggcct tcatccagaa atcacatttc aacacacatc agagaattca
                                                                    1800
tactggagaa aagccgtatg aatgcagtga ctgtgggaaa tccttcacta agaagtcaca
                                                                   1860
actocatgtg catcaaagaa ttcacaccgg agagaaaccc tatatatgta cagaatgtgg
                                                                    1920
aaaggtette acteacagga caaaceteac cacacateag aaaacteata etggggaaaa
                                                                    1980
accetatatg tgtgctgaat gtggaaagge ttttactgae cagtcaaate teattaaaca
                                                                    2040
                                                                    2100
ccagaaaact cacactggag agaaacccta taagtgcaat ggctgtggaa aagccttcat
atggaagtcg cgcctcaaaa tacatcagaa atctcatatt ggagagagac actatgaatg
                                                                    2160
                                                                    2220
caaggactgc gggaaagcct tcatccagaa atcaacacta agcgtgcatc agagaatcca
                                                                    2280
tacaggagag aaaccgtacg tttgtcctga atgcgggaag gcctttatcc agaaatcgca
cttcattgcg catcatagaa tccatactgg agagaagcct tatgaatgca gcgactgtgg
                                                                    2340
                                                                    2400
gaaatgette actaagaagt cacaacteeg tgtgcatcag aaaateeaca caggtgagaa
geccaatata tgtgetgaat gtggaaagge etteactgae egateaaate teataacaea
                                                                    2460
                                                                    2520
tcagaaaatc cacactaggg agaaacccta tgaatgtggt gactgcggga aaaccttcac
                                                                    2580
ctggaagtca cgcctcaata tacatcagaa gtctcatact ggagaaagac actatgaatg
                                                                    2640
tagtaaatgt gggaaagett teateeagaa ageeacaeta agtatgeate agataattea
tacaggaaag aaaccttatg cttgtacaga atgtcagaag gcctttactg acagatcgaa
                                                                    2700
totoattaaa caccagaaaa tgoatagtgg agaaaaacgo tataaagcca gtgactgaga '
                                                                    2760
aagtetteae etggaaatea caactgggta tgeateaggt atetaatage agggaggagg
                                                                    2820
                                                                    2876
aaggcctgtt gctgcaatca ttgtacaggg ggaaatgggt atgagagact gaggct
```

```
<210> 5902
<211> 802
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (632)...(209)
<223> similar to gi3786408 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5902
ttaaagtgtg aatatttggg gaacacagac caaggctgtg ccctgatttt ccctttctga
                                                                       60
aagtcacact ttaactaaaa tatttctgtt ctacaaattt ccatatatca aaaaaaagct
                                                                      120
gtagaattta attcatagtg tottotoaaa aggaagagga aaacaaaaac agttottogt
                                                                      180
aggagtettt tattttttgg tgtettaaat gteaatgate acaaaaaett eegggttete
                                                                      240
ttcattatag acctgcattg ctgaatatgt tattgctttg acttctgttc cctgagggtg
                                                                      300
                                                                      360
cttggacaat gaaaattett eteeceacee ggggtatgaa gaatteatea geaetgaaet
                                                                      420
tataaagcca ttcatccaaa aagtgaaaca gaagagactg taagtcatct ccttgggttt
ctacttctac tgtttggagg ggctccactg tcccagtatc tgtcatgtaa ccaaacatgg
                                                                      480
                                                                      540
ccattgcaca ttgctcaaat gcttcctcca gagtatctcc ccatgcgtgt aaccaagatt
gaaacattca gtcttcctac tgacgtggtt tcaaaggaat gaactcccgc tatactcact
                                                                      600
ggacatctgc tgtatgatcc aaatatgtaa agagagaagt aagccaccta ctcacactcg
                                                                      660
                                                                      720
tacttcctat tgactggcgg atacttggcc ttgatcgcct tctgttcttc agtcaaattg
                                                                      780
taatetetgg catetteete tteetgegee atgaetgeag gattagaeeg geaegagete
                                                                      802
gtgcagagtt cctcaaagcg tt
```

```
<210> 5903
<211> 2805
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2788)...(243)
<223> similar to gi299471 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5903
ttagttattg ctgttaatct cctactttgc ttgatttatt gatttattta ctgagatgga
                                                                       60
tettgetetg ttgeetggge tggagtgeaa tggegegate teggeteaet geaaceteeg
                                                                      120
                                                                      180
cetgececae etegggttea agtgattete cegeeteage etecegagta getgggaeta
caggeatgea ceaceaegee eggetaattt ttgtattttt agaegagaea gggttteaee
                                                                      240
ctgttggcca ggctggtctc aaactcctaa cctcaggtga tccaactgcc tcggcctccc
                                                                      300
aaagtgctgg gattacaggt atgagccacc gtgcccagca gaatttttta actatttggt
                                                                      360
                                                                      420
tacgactaat ttggataatg tagtgcatgc agctttgatt tgtgccacta agagtgggca
aactgtcttc ctttttgtga atcagtaaaa attttccctc aacatgtgtt tgacagttgt
                                                                      480
                                                                      540
catteactge taagttaagg catttggtaa accacacage etetgeatee tteetagega
cagccacaag aaaaggtggg catgggaggg aaaatgctct tgtgaattga actggaggca
                                                                      600
agetecaett ttetttagaa aaagatgtag atcaaaataa etaatatttt etteettget
                                                                      660
cgatttctgt gccttccatg gtacatcaaa ataataggac cagtaatggc cacaatcctg
                                                                      720
                                                                      780
ttgactgetg ttaccttege cecaatattt etttaageat ttettaagea tetagettgt
                                                                      840
gttttgttat atttaacaga ttttcttaaa gtattgtatg aattaaaacc agaaataact
                                                                      900
tcattttcct agaaagggat aatttctccc ggagaataaa tcctgaggat ttagttagat
                                                                      960
gctgtgggta ttgtatttta aataatattt taatgggagc agctgattga ctttcaaatg
gattgtttac attaatagta attctgcagt tgttttacta ttgcatcagt ctgccagaca
                                                                     1020
agttccatgt gcatatttta attcagaact aattatactt aaaaatttaa accctgcata
                                                                     1080
```

```
cttccccaaa aatgtttagg gcagttaaaa acaactcttt tggaagatga ctcgcatttt
                                                                     1140
aagaaatgag agaacactgt caaatgatga atgcatttaa aaaataattt gcaaagtgat
                                                                     1200
aaaagccctt agttttaaat cttacaatga cattagctct tacaagaact cagtaagtat
                                                                     1260
ttgctgtttt ttaatgggat agtaataagg ttgaggtttt tgttaaggga cgtttactta
tcatcaaact ctatacttac tactacaagg aaactccaag tacattaaac actatgtttt
                                                                     1380
ataattettt gecaeactge caataaatte tgtteacatt ttaaggatga caagteeact
                                                                     1440
atatgtaaca cgtaagaatg ctatcctggc agtagacaca gggccagaat aaactggcaa
                                                                     1500
gttttcattc cacacaagtg tgggaaaaaa atgactacaa cttaaacttt atttacttga
                                                                     1560
ttgagagett attgeacatg aaatgtttta tgtggttgat ettaaetteg tttaeattga
                                                                     1620
cttctatgct caagattgtt caattgctgc tgctgccgtt gtgttttctt tcaggatcga
                                                                     1680
ggtgggtacc ttcatataat atcttctttt taatttcttc tctggcaatt ctttcctgga
                                                                     1740
ttetttgett tgeataatta taeetaeaat gaaaceagea teeeaaagte aeeaagataa
                                                                     1800
accetectae tecaacatea catgatette taattetaet agtgaacaaa aaatgtecaa
                                                                     1860
agccagccac aacagatect aatgaaccat acaatattga atgccgggcg cagggagtat
                                                                     1920
tttcaacatc taaaaatcct aggagcttaa gggactagaa tgaaaaaaaa gaacctagat
                                                                     1980
tgagtaagaa agtatttcat tttggggtgc tttggcaaaa atgacaatac accatttctt
                                                                     2040
ttettgtagt tgagggttta aactagagta tgtgecaegt gacaacetaa ateagettge
                                                                     2100
gttgtctttg tccacctttg gtatgcagtc tgaatcttta aatccgaaaa ccttacaaat
                                                                     2160
tggaccggaa aaccettaag cagtagggta acttggaget gtatettaat ttgetaatea
                                                                     2220
actgacttgg aaataggata attcatttta tgagetettt aaatgagttt atttgggaat
                                                                     2280
atgeetatea tiggaatiga aageageata getigetiea giaaeteeaa taattiggga
                                                                     2340
agcagaaatg gaaaaagtaa tttgagtcat gtttgcttat gtagtgccgt ttaaaattcc
                                                                     2400
cctagtaatt acctttcata ttttattaac taggttaaca tcaactgtgg ttgtaagagt
                                                                     2460
aaatgtttca ccttaagata aacatgggca atatattaaa ctctagtctg ttttcttgcc
                                                                     2520
tgtgaagtga ggctgcactt gattatattt gattctttgt tcgtaataca tgggaacgac
                                                                     2580
agctaagtgt ggtgaaaaac gcggggatcc aaagagctgg atttttatct cagatctgcc
                                                                     2640
gctaactttt gtatcctata ggctactttt atttctatgg tctcaatcta taacatgaat
                                                                     2700
gggttgggtt aaatgactga agttccttca agtgctaaaa ttctttttct acagtcttca
                                                                     2760
ttggatttat gtatttctta ttcctaatat gtttaactgg ggatg
                                                                     2805
```

```
<210> 5904
<211> 2765
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1927)...(735)
<223> similar to gi412941 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5904
ctgcagcett gaccteccag gatcaagtga teeteccaee ttageeteca gagtagetgg
                                                                       60
gaccacaggt gtacattttt taaaagtgtt ttgtagagat agggtctcac tatgttaccc
                                                                      120
aggetggtet caaatgeetg gatteaagta ateeteeeat etetgeetee caaaagtget
                                                                      180
aggattacag gcgtgagcca ccccgcctgg cctgaactac tatcttttat tgtcttcttc
                                                                      240
actatecece actaaageag gtteetggtg ggeaggaact cetecettaa cetetetggg
                                                                      300
cttgtttcct cacctttaaa atgggtgtta tcagagtccc tgcatctcag agtgttgcta
                                                                      360
tggtgactga atgagttcat taatgtaagg cacttcaaca gtgcccaagg tgctcaataa
                                                                      420
atagatetag etacagtagt gttececact ggteecetgt geettgatge egggeaaagg
                                                                      480
```

```
aatagtgcag acaggcagga ggaggcagag agggagagag agggagtggg agtgggggaa
                                                                      540
cgtcagggat ggagacccca ggcaggcgcc caatgacaca gagatccgca gtcctctctc
                                                                      600
catctttaat ggggccccag gtgggcttgg ggcacgggtg tccttaaata cagcccccat
                                                                      660
                                                                      720
gggcaaggca gcggggggg ggcggggtgg ggccgggcct gccggggcgg ggcggggggg
ggcgggacct cagctgcact tgcaggagcg cacgatcatg ttggacagct gctccacctt
                                                                      780
gggcttgcgg cccacggtag tacacgatgg gcagggggtt ccagcgcctg cggcacgcag
                                                                      840
                                                                      900
caccggcgcc gccgaagcgc cccggtttat gcctggttgt acagggccag gaccttgctg
tactgcgtgt ccaggeteca aatgtagggg cagggeeega gggcagaagt tggcatggta
                                                                    960
                                                                     1020
gcccttgggc ctcgtggaat ccacttccca gccgaaggtc cttgcggaaa atcaaatgtt
                                                                     1080
aacaatgccg caacgcaagc aattecttee teegtggaag etgaaacaaa taattggtgt
eccagggest ggeggtgeeg ggaagetttg cagatgetgg geestetesa geggggtgge
                                                                     1140
catgagaagc aggaaaggcc ggttcatgcc atgaatggtg gccaggtcac ctcgggcggc
                                                                     1200
cggtagtgaa cccgttgatg tccacttgca gtgtgttatc cctgctgtca caggagcagt
                                                                     1260
gggcgctaag gcgaaagccc tcaatttccc ctccacggct caaccactgc cgcacaactc
                                                                     1320
cggtgacatc aaaagataac cactctggcg agtcgctggg tgccagcagc cggttgctga
                                                                     1380
ggtategeca ggaattgttg etgtatttet ggtacagete caegtgetge tecaetttta
                                                                     1440
acttgagect cagcagacge agetetgece gggagageaa caegggttea ggtacegett
                                                                     1500
ctcggagete tgatgtgttg aagaacatat atatgetgtg tgtactetge ttgaacttgt
                                                                     1560
catagatttc gttgtgggtt tccaccatta gcacgcgggt gacctccttg gcgtagtagt
                                                                     1620
eggeeteagg etegggetee ggttetgeae teteceegge eacceggteg egggtgetgt
                                                                     1680
tgtacagggc gagcacggcc tcgggcagcg ggccgggcgg cacctccccc tggctcgggg
                                                                     1740
ggctggcgag ccgcagcttg gacaggatct ggccgcggat ggcctcgatg cgcttccgct
                                                                     1800
tcaccagete catgtegata gtettgcagg tggatagtee egeggeegge eggeeaggeg
                                                                     1860
teageaceag tagecacage ageggtagea geageggeag cageegeage eeggagggeg
                                                                     1920
gcatggggga ggcggccc cccggcactg ccgagagcgc gaacagggct ggtgtggtgg
                                                                     1980
ggaggccccg ccctgcagg ggctgggggt ctcccggcaa aaggtaggag ggcctcgagg
                                                                     2040
gaaagetgag geteetcagg gagaaggeg cagtggtgga ggggaggett ggaceggggg
                                                                     2100
tgtctcagta tcccacggaa ataacctaga tgggcgcgat ctggtaccag aaggtgggtg
                                                                     2160
gtettgaata ggggatetgt ggeaggtegg agagagatee gteteetgga ggagaaaggg
                                                                     2220
totaggatge gegggggete aggagacagg ceggggatga aggeggegtg caggggqtge
                                                                     2280
gcccgaggtc tggggaaaag tctttgcggg aggccgggtc ggcgactccc gagggctggt
                                                                     2340
ceggaatggg ggegeetgag ggacgeegtg tagggggcag ggagggagca agegteeceg
                                                                     2400
geggeaaagg gaggeggtet ggggteeeca agteetgeet eetegegggg cagegtegeg
                                                                     2460
ccaagaggtc cccgcgcctc cggctcccag cggcaacgga aaagtctcaa aagttttttt
                                                                     2520
cetettetee egaceagete greecteete eegeteetee teeceeteet eeeegeagtg
                                                                     2580
gegggggegg eggeggeteg teteagaete tggggeetea ggetgeteet eggegaetee
                                                                     2640
tteeteeget eegggeegag geeggeeeeg egggeggete agageegggg ggggtgeeee
                                                                     2700
ggacggggcg tececetge eeeeggecgg ggeeeteget gtetggetge teegeggagg
                                                                     2760
                                                                     2765
gaggt
```

```
<210> 5905

<211> 1874

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1875)

<223> n = a,t,c or g

<220>

<221> misc_feature

<222> (1)...(1875)
```

<223> similar to gi5566244 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5905
ttttgctcca agcgaattaa atggggaacc cccggggttt tcccctcccg acgttgttaa
                                                                       60
aacccgggcc cggaaattga ttttgggggc cccaaaaaaa aaattttacc ttgccagccc
                                                                      120
ccggaaataa aacttgattc tttaaaacgg ccccccttt ttttttttt tcacatgtgt
                                                                      180
aacatttatt atattaatac ttaacaaagc cctccaagac ccaggctccc cctacccct
                                                                      240
accttqqqcc acqtcttcat cttagtcttt ggagagaaag ctctgaagtc aagtggtgag
                                                                      300
ttttccagaa caagtggttc ttctccttga tgacggccca gtcctcaaag ctgtcgatgt
                                                                      360
gttccttcag ccgcgagcag agctgcacgt tgcccacgta gtccaggagg acatcgatga
                                                                      420
tgggcccgc ccagcggctc acctctgggg cagatacgaa ctcacagaac tgcaccacgc
                                                                      480
                                                                      540
tgggctcctt gtcggccgcg ggcgcgtcgt tgaacctgct ggagggctgc ggggccggcg
ggtgcgggcc gttgccgtag aggcatgaga agcagggctc gccgtcgcag cccaggtcca
                                                                      600
tgaggaactt gagcagcgac aggcacttca tggcgaacat gatggtggcg gggaaggcgg
                                                                      660
                                                                      720
tggggtgcgt ggcgatatag gcgtcgatgt tcgcgccgtg gtccagcagc agctgcattg
tgcgcaggca gccgtggcgg atggccacga gcaaggggct gatgacgtcg cggttggggt
                                                                      780
                                                                      840
eggegegtg ttgcagcagc ageteggtgg egtacaegtt gttgttgacc acegegaagt
acagegegga getgegeegg tettegtaga ggegegegeg etegggegee ageggegtgt
                                                                      900
teacgtegaa gegegegete ageagegeet ecageacete gtegtggttg egeteggeeg
                                                                      960
                                                                     1020
ccaggtgcag cggactgacg ccgctacggc gtatgcgcgt gcggctggtc accggcagca
gcatctgcac gatcctgtag ttgcccttct tggaggcgat gtgcagcggg agcaagccgt
                                                                     1080
cettgttggt ettgttggeg teggeaceet gtgacageag aaactecace acctecteat
                                                                     1140
geteattett geaggeeteg tagagggeag acgegttgte getggeetge gtgttgatgt
                                                                     1200
caqcaccgta cttggctaag aacctcaagg cctccaactg tccactctgg gcggccacga
                                                                     1260
acaaggggct gatgccgtag gcattcttgg attccacctt ggctcctccg ctcaccagga
                                                                     1320
tetgeatgae etceaggtea ttgegagaea dagaetegtg cagageggte dageegggt
                                                                     1380
tgcagcggtg gttggtgtct gcgttgtgct gcaccaagaa tcttcacggc ttccgcgttc
                                                                     1440
                                                                     1500
ttgcgctcac aggctttgta gagcggtgtc tctcgggatt tgttggagat gtccggctct
gcccctgctt ggagcagtga caggagacag tccaggtggc ccctgcacgt tgccaaagta
                                                                     1560
aacggettgt tteeteetge agggtgeget ggtegatggt ceettgggta egetegetge
                                                                     1620
aggactttca ggcagcccac ctggccatag tatgcggcct cgtgcagcgg cagccagccc
                                                                     1680
                                                                     1740
teettgttgg getetgegag attetteeet teettgatea tggtetteaa ggeetettea
                                                                     1800
gtcgccatcc ttgatggcct ttatcaaggg gtccgcaggc gccagctggg aggtcttgaa
caagetgetg etgtatttet geatgacece ttggaacagn eecattggge eegggeegge
                                                                     1860
                                                                     1874
gaactctcag gagg
```

```
<210> 5906
<211> 2838
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2769)...(353)
<223> similar to gi4995641 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>	5906					
tttttttt	ttgactgttc	atggccatct	ttattcccag	tgctggctat	cccaaaatac	60
				gggtcaccac		120
aaagcagcct	tgagccctgc	cccaccccct	gccctgcgga	agccaagtcc	ccagctataa	180
				acacaggggc		240
				caagcagcct		300
				aaggcttcac		360
				ggtggagctt		420
				tctcactgtc		480
				aatacagcag		540
				agctatgaat		600
cacctcggct	gggggcgact	tctcacccac	gctgcctggc	agcttctcga	atcaggtggc	660
				tccgagacag		720
aggccagtca	gtgagcgcag	ctggtggtgg	teggeggtee	tgacacggtc	tagcaggggg	780
				ccccggccc		840
				gtcgtgtgcc		90,0
				gggctccaca		960
				tcggcggcga		1020
gcgcagccgc	cggctctgcg	gcgtgaagca	gcccacgacc	tctcccggcg	gcgcccccgc	1080
				gacggcggca		1140
				tccacgctct		1200
tttgcccgcg	tccagggcgt	ggttgataga	ggtgaccagg	gcgtccacca	gcccgtggca	1260
ctcccgcatc	ttctggcgag	tggcctgaga	ggctgagctg	aggttcctgg	ggaagccggt	1320
ggcgttgtag	aagatctccg	cctccgaggc	gttctgctgg	atgagggggg	ggacccccag	1380
cccccgacaa	gggggctcaa	acaccaaggt	cttgtgagct	gcttccagcg	gtgtcttctt	1440
ggccaggcgg	tccttcaggt	ggtcgctcgg	atgaaaggtt	ccacaggatc	cctgtgacat	1500
ttttgcgaag	ctcatcatcc	tgctcccgca	gtgtccgcag	cagctcgaag	atcccgttct	1560
cctccaccag	ggccagcttg	ttgtcagcgt	tgtcgtagat	gaggttgcgc	atggcacctg	1620
tggcatggcg	ctgcacttcc	tggttggçgt	ggttgaagag	cttcaccagc	ctaggcacgg	1680
cctgaaggct	gcgggcctgc	ttcttggcgg	ctgcatcgct	gtagcacttg	tgctggatgt	1740
				gaggtacttg		1800
				ggttcggtgg		1860
				caggctgagg		1920
				cggcactgcc		1980
				cacggcaggg		2040
				ccccctgcc		2100
				ggaggtggcc		2160
				gggccccagc	,	2220
				accgcgctca		2280
				gtacccagcg		2340
				gctcagatcc		2400
				gggccggaag		2460
				ctgcagggtg		2520
				ctcagcggcc		2580 2640
				ctcctggacg		
				cagctgcagg		2700 2760
				cagcaggaag		, .
		ggcccgggcc	rggeggeege	ctccaaaccc	adctatette	2820 2838
acgtcctgtc	cygaatte	•	2			2030

<210> 5907 <211> 873

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (382)...(694)
<223> similar to gi4769004 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5907 gaatctagga cattctatag agcctggatt cttcaaaaaa gtcatacaca cacacatg 60 120 tacgtacacc ttaatttata agatagaaat caaaagaaac tacagagatg aacagcccaa 180 tgcaaggcat gcccttcatt gatttctgga tttttttaag tcataaaaga tatttgggag tcacttaaga aaattagaat gcaaactgta tattaaatgg cattatggaa ttatcattac 240 300 ttttcttagg tgagataagg atattgtaat tatacaagag atgtccttca tctaggagat 360 ggctgctgaa gtattgaagg gtaaagtgtc ctgtgcttat aactggcttt caaacagaca aacaaaaaaa gctggtccaa aatggcagtg gcaatggatg cggatacccc aagaagtacc 420 aacagcagtg ctttgaagta aaaaagtgaa atgcagtagc tagccctctg ggcttgggat 480 540 gttgtggtta ataactgtgc catctgcagg aatcacagca tggatctgca ttgaatgtca agctaaccaa gagtetgeca etteagaagt gtgtacegtt geaeggggag eetgtaaceg 600 tgetttteae tteaetgtet eteteaetgg eteaaaacae aacagetgtg eetgttggae 660 720 aacagacaat aggaatteee aaagtatgga caecagaaaa agaattette catcaagett 780 aactqttttq tqattcattt aatgacttgc ccttctgtca cttaattata aattagatag aactgtgtct tttctgcttt gtctttgcca tttgctgttc tcgcagccac attgtattct 840 gtgtcaaata aagtccagtt ggattctaga gcg 873

```
<210> 5908
<211> 1316
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (886)...(224)
<223> similar to gi296669 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5908
tttttttttt ttggagaagg aaatcgtctc aattgtttat tcgactcaca gtcagtgcac
                                                                       60
acactetace atecaaaagt egaagetgtg acaategact getacaggea gtgcatggat
                                                                      120
                                                                      180
gtgtaaacaa acacaaatga aaatgcaaat cagagtgggc ggggccaagg cccactgtta
cattcacage acagggtaag tgcaaaagaa caggatgtca ggatgggggg cggggagcac
                                                                      240
aggitectte etgecetgga ggetgeetee aggeateage etgggaggtg ggttagtgee
                                                                      300
catggaaccc tectgeecag gaagetgeet eegggeatea geetgggagg egggttagtg
                                                                      360
cccatggate eggtgtetgg gaaggggeee acagaagatg ggccacacee agcateatet
                                                                      420
cetetetgtg gtgcgccctc ccatecccag acceetttec catteagggg agagggccc
                                                                      480
tggtcacagg agccagtcct ctgacctcct gagtgtggaa acccaggagg ggagtgtgtt
                                                                      540
```

```
600
tctcctqcaq gcctctcaac ctggaaaggg cagagccaca gcagaacgcg ttggggccac
agacactege teaggtgaag acactgagaa gacactgeeg ggetgacaga accegeggeg
                                                                      660
ggggaacgcg cttgcaaaca ggactctcga ggcccagggg aggctctgcc ccataaggcc
                                                                      720
                                                                      780
caaggagcgt ttgtgcgttg aactgaaggc aaagtgctgg gcagtttctt gtcctaatga
aggtggggaa gctggtccgg ccacatacat cctctgacct cccccaagtg gtccccgggc
                                                                      840
ccacaggtga caggggcctg agcgatccct ggtctgagcc cccagctcag agcctagcac
                                                                      900
cacccaggga ggtctgggct catggaaggg ggatgggcgg gggcaggagg gcccagcccc
                                                                      960
acctccgccc gtctttggtg gtgacagagg tgggaggaga aaagacgatc tttggtaggg
                                                                     1020
cgagggaatg tcaaaggaca ctgtcaaggg cccagttcct gctcagaaga gagcacagga
                                                                     1080
                                                                     1140
gtgggaggec caectetgec ceatetetgg atggeccagg cetgetgeec actaaggtgg
ccccactctc cttctctgga gttgcaaact ctctgagaag gcggttgagg tggggagggc
                                                                     1200
                                                                     1260
atcaggacag gccagctgga tgctgagacc atatagccac aggtggcttc tagctcagga
cactgtgacc ttctcctcag ggctctaggc cccatccttc acctcctccc tcccag
                                                                     1316
```

```
<210> 5909
<211> 1913
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (419)...(132)
<223> similar to gi5816693 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5909
ggaggacccc ctggctggag ctgacccaca gagtagggaa tcatggctgg agaattggat
                                                                       60:
agcagagtaa tgtttgacct ctggaaacac tcattctcaa tgcaagatcc tccgctgcaa
                                                                      120
tgctgagtac gtatcgtcca ctctgagcct tagaggtggg ggttcatcag gagcacttcg
                                                                      180
aggaggagga ggaggaggcc ggggtggagg ggtgggctct ggcggcctct gtcgagccct
                                                                      240
cegeteetat gegetetgea eteggegeae egecegeaee tgeegegggg acetegeett
                                                                     . 300
ccattcggcg gtacatggca tcgaagacct gatgatccag cacaactgct cccgccaggg
                                                                      360
cectacagee ecteceege eceggggeee egecetteea ggegeggget eeggeeteee
                                                                      420
                                                                      480
tgccccggac ccttgtgact atgaaggccg gttttcccgg ctgcatggtc gtcccccggg
gttcttgcat tgcgcttcct tcggggaccc ccatgtgcgc agcttccacc atcactttca
                                                                      540
cacatgccgt gtccaaggag cttggcctct actggataat gacttcctct ttgtccaagc
                                                                      600
caccagetee eccatggegt tgggggeeaa egetacegee acceggaage teaccateat
                                                                      660
atttaagaac atgcaggaat gcattgatca gaaggtgtat caggctgagg tggataatct
                                                                      720
tectgtagee tttgaagatg gttetateaa tggaggtgae egacetgggg gateeagttt
                                                                      780
gtcgattcaa actgctaacc ctgggaacca tgtggagatc caagctgcct acattggcac
                                                                      840
aactataatc atteggeaga eagetgggea geteteette tecateaagg tageagagga
                                                                      900
tgtggccatg gccttctcag ctgaacagga cctgcagetc tgtgttgggg ggtgccctcc
                                                                      960
aagtcagega etetetegat eagagegeaa tegtegggga getataacea ttgataetge
                                                                     1020
cagacggctg tgcaaggaag ggcttccagt ggaagatgct tacttccatt cctgtgtctt
                                                                     1080
tgatgtttta atttctggtg atcccaactt taccgtggca gctcaggcag cactggagga
                                                                     1140
tgcccgagcc ttcctgccag acttagagaa gctgcatctc ttcccctcag atgctggggt
                                                                     1200
tectetttee teageaacce tettagetee acteetttet gggetetttg ttetgtgget
                                                                     1260
ttgcattcag taaggggacc atcagtccca ttactagttt ggaaatgatt tggagataca
                                                                     1320
gattggcata gaagaatgta aagaatcatt aaaggaaggc aggggcctag ggagacacgt
                                                                     1380
tgaaacaatg gacatttttc cagagtcaga tgtaggctgc agtcccgggg ttgaaattat
                                                                     1440
```

```
cacagaataa ggattetggg caaggttact gcatteegga tetetgtggg getetteeae
                                                                     1500
caatttttcc agcctccatt tattggtaaa ccaaattgtt cctaacccca tttactgcca
                                                                     1560
gatttcaccc cttataagtt tagaggtcca tgaagggttt taatggatcc agtaaggatt
                                                                     1620
ttaagggttg agatttttaa ggagccaaga gctgaaagca gaagacatga tcattagcca
                                                                     1680
taagaaactc aaaggaggaa gacataatta gggaaagaag tctatttgat gaatatgtgt
                                                                     1740
gtgtaaggta tgttctgctt tcttgattca aaaatgaagc aggcattgtc tagctcttaa
                                                                     1800
ggtgaaggga gtctctgctt tttgaagaat ggcacaggta ggacagaagt atcatcccta
                                                                     1860
                                                                     1913
ccccctaact aatctgttat taaagctaca aattcttccc cccaaaaaaa aaa
```

```
<210> 5910
<211> 864
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (462)...(764)
<223> similar to gi3288493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5910
agteagggga gacetgggte eccegeactg actteettte teetcacagg geaccageet
                                                                       60
ccaaatggct atggaccggg agcagaacca ggtgaggagg cccttcctgg agttcctccc
                                                                      120
etecettece tteetettee etectettee ttetgecate ccaggaagag gggaggecag
                                                                      180
ggetgtgget etegetgace cecatetgtg agteacagtt ttetetecee caggttttaa
                                                                      240
tggtggcctc gagccacaga aaattggtga gtcctcctgg gcccccgacc catgttgagc
                                                                      300
ggaagetgge atetecetea tgeetgagte agtetgtetg teegeateee eetgtetatg
                                                                      360
agetggteae etggeeetee tgatgetgte eetgtteeae tageetgtee etageteete
                                                                      420
tccaatctct gtcctgcagg tttaggttat gggaatggtg tcctgggagc cagggtcttc
                                                                      480
ecegaggeee acceacagee aggtgeetgg ggageagggg teggggtggg agagttggge
                                                                      540
teagggeece ageceageet/etgacaceet ettteeteet eeagggttee atggggeeaa
                                                                      600
tggttttagg aatagtgagt cagacccagg ggacaaagtg cagtggagtg ggggagacaa
                                                                      660
cagcccaggg gctaggcggg aatgaccaga gtctcttgga ggggatgggg tggaagctct
                                                                      720
ggtgtacccc aaagcagcag ctccagcccc tgaaggaaat ggtaagaaat gagccttctg
                                                                      780
ggagcagage caagcecaae aggggecagg ggteecaget eetgtgggea agggtaeeee
                                                                      840
tgccatcaga attccaccgc acgg
                                                                      864
```

```
<210> 5911
<211> 978
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (737)...(262)
<223> similar to gi206352 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5911
ttttttttt ttctaaatgt gtttactatt tattttttac tcttaaagtg atgttattta
                                                                       60
catgtgttgt tagaatgcaa accttatcag taggacatca aggattaagc tctggcagta
                                                                      120
ttaatagtta gaacagtcac atgtatgcaa atttttacat agttaaaaag aagaatcact
                                                                      180
gtaaaataaa tgcttattct ttaattataa gtgatgtgga acaatgtgta cttagttcta
                                                                      240
aagttcagtc aaggagactt ccaggatgtg catagctact gtatgagtgt ggggtgcaga
                                                                      300
gatggaggat gcttctggaa gtcaagcagt ggaattccat ggtatactca gaaaagttaa
                                                                      360
tagttcagtt atttccaaga agccttcttg ctgcagacca gtaattaatg gtcccgctgc
                                                                      420
tectetett cattggtgee ttettettet teagggaatg etgatteatt etggeettte
                                                                      480
agatgettaa eccettttat ggtgggtggt gtgtacacae tetgetteet ttgettaggg
                                                                      540
gatgcattct gtaattcccc ttgtgtgttg ggccccctct tgtcatctat ttctgggggg
                                                                      600
ttatgctcat tgagaatcac aagtgatgct ggtgtaggtc ttcttttcct gatctgctct
                                                                      660
gctgcttcag gtgcaatctg actctggaat acaggcacgg caaactgtat ctttttggga
                                                                      720
ctgttgggct ccatggtaat gatgataatt agtcagagat gtgaagagct cagaaagact
                                                                      780
aaccctaagt ggtgtccggg atgtgtttcc tcagacacac tccactaagc cacacagagt
                                                                      840
gettegtaat aaatagetgt aatteeagat egageaagtg aagatgeega ggtttgagta
                                                                      900
accecettet teaacateea eggtgatgee tggettgeet gtteeceeae caateeettg
                                                                      960
gatcctctca gcacaata
                                                                      978
```

```
<210> 5912
<211> 783
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (706)...(737)
<223> similar to gill96912 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400>.5912
cggcggtgcc cgggcgtccc ctgcagacac gcagccccgt ggaactcccg gcgggacggt
                                                                       60
tggggctgga ggaacaggac gcccgctctc ggcctccctt cccgggcctg ggctgagggc
                                                                      120
agccgttggt gggtttcagg gccgcctggg cagaatgtca cgatggacga gggcggcacg
                                                                      180
cocctgetee ecgacageet ggtetaccag atetteetga geetgggeee ggeegaegtg
                                                                      240
ctggccgccg ggctggtgtg ccgccaatgg caggccgtgt cgcgggacga gttcctgtgg
                                                                      300
agggagcagt tetacegeta etaceaggtg gecegegacg tgeceegaca eccageggee
                                                                      360
atgteetggt acgaggagtt ccagcggetg tatgacacgg tgccctgcgt ggaggtgcag
                                                                      420
acgetgeggg aacacacaga ceaggteetg caceteaget teteceatte egggtaceag
                                                                      480
ttcgcgtcct gctccaagga ctgcactgtg aagatctgga gcaacgacct gaccatctcg
                                                                      540
ctgctgcaca gcgcggacat gcggccctac aactggagct acacccagtt ctcccagttc
                                                                      600
aacaaggacg actegetact getggeeteg ggggtgttee tggggeegea caacteetea
                                                                      660
teeggegaga ttgetgteat cageetagae teettegege tgetgteeeg egtgeggaae
                                                                      720
aagecetatg aegtgtttgg etgeeggete aeegagaeea gteteatete ggggaaeetg
                                                                      780
cac
                                                                      783
```

```
<210> 5913
<211> 1287
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1084)...(194)
<223> similar to gil907076 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5913
ttttttttt ttatttgcat gtgccaggaa atatcctaca tttattgtta caaaaaccat
gttatcacgt tagtgtggaa ttctttagaa gccccggcta aataagcttt agaaatggaa
                                                                      120
                                                                      180
tgccttcaat ggctcaatct cagaaatggc aaaattctag gacacatcaa gacctgctct
teegetttee actagtteee aatetttgat tteeaggttt tggeeettte aaacceattt
                                                                      240
tttgcgtttc tgaaatcaag aatagettga gaaatetett cattggtgtt catcacaaat
                                                                      300
gggaccatgt tgggataact gggttctctt aatggctccc cagcaattaa gacaaagtgg
                                                                      360
gettetettg ggateettgt tetecaettg ggacaetggt cacettetee aagcaactge
                                                                      420
tgtgtgatga ggttctattt ttttggtggg gcatcatcgg gccccatata cacatctcca
                                                                      480
gatategtgt aaatgaaget tgteeaceet ttaagggata ggttgggaaa tgtttggete
                                                                      540
cctgggtcca atttgaagtc caaatataag gttggtgtgc caagtgtaaa ccttggacct
                                                                      600
                                                                      660
tattcccaga gctttctcag aaatgacagc aactgtcaca ccatcctact tggggttaag
                                                                      720
ggatttettt actttteagt teetgggtae ttggggetee accatettet etgageteet
caaattaaac ccacagttgt aagcccatgg gctgggctcc tctgagcaag gcatctcagc
                                                                      780
gtgcagaatg ccccggcccg cagtcatcca ctgcaaatct cctgggttca ttttaccagt
                                                                      840
gtgtccacag aagtcttcat gggccatgct gcccccttcc aggaggtagg atactgtttc
                                                                      900
                                                                      960
aaaacctcga tgtggatgat caggaaatcc tcctggtcta cctcctttaa attcatcaaa
cagtaaaaac ggatccagat tttttaactc gggtctgcca atgcttctcc ggaccctcgc
tecaaceet tecgactget eceggetgag caetgagaga gtaactttet tggaggacee
                                                                     1080
catatoggag totaaaaaga gagtgttotg atgotgagot gtagaggatg gaggggotgo
                                                                     1140
ggtagcggca cctggagcct tagcggcggg ggtgacgcga agagccgccg ggagcgagtg
                                                                     1200
cagggagggc aggttaagag agtgtgggtc cagtcgcctc accgtgactc agcgcttcgc
                                                                     1260
                                                                     1287
ggccggcggc ctagaggagg cgggagg
```

```
<210> 5914
<211> 2977
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (57)...(2602)
<223> similar to gi1907120 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5914 caagtgtgga gaaagcggct ctgggtctag attgagggat actccccctt tccaccatgg 60 120 gcaagaaggg caaagttggc aagagccgac gagacaagtt ttatcacttg gcgaaggaga 180 coggettaccg ttcccgatct gctttcaagc tgatccagct caatcgccgc tttcagttcc tgcagaaagc ccgagccttg ctggacctgt gtgctgcgcc agggggatgg ctgcaggtag 240 ctgccaagtt tatgcctgta tccagcctta ttgtgggagt ggacctggtt ccaatcaagc 300 ctctccccaa tgtggtgact ctccaggagg acatcacaac agaacgttgt aggcaggccc 360 tgaggaagga gctgaagacc tggaaggttg atgttgtgct caatgatggg gcccccaacg 420 480 ttggggctag ctgggtccat gatgcttact cacaagccca tttgacactg atggctctac gtttggcttg tgactttttg gcccgtggtg gcagcttcat cacaaaggtt ttccgttctc 540 gtgactatca gcctctgcta tggatctttc agcagctgtt ccgccgtgtc caggccacca 600 660 agececaage etetegeeat gaatetgeag agatetttgt agtetgeeaa ggatteetgg 720 cccctgacaa ggttgacagt aaattctttg accccaaatt tgcctttaag gaggttgaag 780 ttcaggctaa gaccgttact gaattggtta ctaagaagaa gccaaaggct gaaggctatg 840 ctgagggtga cctcactctc tatcaccgta cctcagtcac tgacttcctc cgagctgcca 900 accetgttga ettectetee aaggeeageg aaateatggt agatgatgaa gagttggeae agcatccagc taccactgag gacatacggg tgtgctgtca ggacatcaga gtgttggggc 960 gcaaggaget caggtegeta ctaaactgga gaacaaaact teggegatat gtggccaaga 1020 agetgaaaga acaagcaaag geaetggaea teageeteag etetggagag gaagatgaag 1080 1140 gtgatgagga ggactcaaca gctggaacca caaagcagcc ctctaaggag gaggaggaag 1200 aggaggagga ggaacaactg aaccagacct tggcagaaat gaaggcccag gaggtggcgg 1260 aattgaagag gaagaaaaag aagctgttgc gtgagcagag aaagcagcgg gagcgtgtgg 1320 agetgaagat ggatetgeet ggggttteea ttgeagaega gggggagaet ggeatgttet ccttgtgcac catccggggt caccagttat tagaggaagt aacacaaggg gatatgagtg 1380 1440 cagcagacac atttctgtcc gatctgccaa gggatgatat ctatgtgtca gatgttgagg 1500 acgacggtga tgacacatct ctggatagtg acctggatcc agaggagctg gcaggagtca ggggacatca gggtctaagg gaccaaaagc gtatgcgact tactgaagtg caagatgata 1560 1620 aagaggagga ggaggaggag aatccactgc tggtaccact ggaggaaaag gcagtactgc 1680 aggaagaaca agccaacctg tggttctcaa agggcagctt tgctgggatc gaggacgatg 1740 ccgatgaggc cctggagatc agtcaggccc agctgttatt tgagaaccgg cggaagggac ggcagcagca gcagaagcag cagctgccac agacaccccc ttcctgtttg aagactgaga 1800 1860 taatgtetee eetgtaeeaa gatgaageee etaagggaae agaggettet teggggaeag 1920 aagetgeeae tggeettgaa ggggaagaaa aggatggeat eteagaeagt gatageagta ctagcagtga ggaagaagag agctgggaac ccctccgtgg taagaagcga agccgtgggc 1980 ctaagtcaga tgatgacggg tttgagatag tgcctattga ggacccagcg aaacatcgga 2040 tactggaccc cgaaggcctt gctctaggtg ctgttattgc ctcttccaaa aaggccaaga 2100 2160 gagaceteat agataaetee tteaaeeggt acaeatttaa tgaggatgag ggggagette 2220 cggagtggtt tgtgcaagag gaaaagcagc accggatacg acagttgcct gttggtaaga 2280 aggaggtgga gcattaccgg aaacgctggc gggaaatcaa tgcacgtccc atcaagaagg tggctgaggc taaggctaga aagaaaagga ggatgctgaa gaggctggag cagaccagga 2340 2400 agaaggcaga agccgtggtg aacacagtgg acatctcaga acgagagaaa gtggcacagc 2460 tgcgaagtet etacaagaag getgggettg geaaggagaa acgecatgte acetacgttg 2520 tagccaaaaa aggtgtgggc cgcaaagtgc gccggccagc tggagtcaga ggtcatttca 2580 aggtggtgga ctcaaggatg aagaaggacc aaagagcaca gcaacgtaag gaacaaaaga 2640 aaaaacacaa acggaagtaa gcagagctgc caggctccca ggagagcatg gggactagga 2700 ggaagggtgt ggcatggctc agtctggccc ccttgattac cggcctagcc cctgctcaca 2760 tcacagetgt etgaagaaca gtgaggtgga gtgeetagaa eteeegtggt ggteetgage agagaggagg atgtcctcct gcctgcctga aggtctccca tgaaaacact gctgaactgt 2820 2880 gttgacactc atgaccettt ttttaaaccg ttaaagggaa gttcggtgtt ggagcgatac tcaatgtagt cagtetacac ctggacgtgt gggccactta agccctcccc acccccatcc 2940 2977 tattcctaaa taaaaccagg ataatggaaa aaaaaaa

```
<210> 5915
<211> 1012
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (235)...(818)
<223> similar to gi297547 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5915 cgacccacgc gtccgctcta cttatccttc caatgatcac tgccaagttc tctttagcca 60 tgcaaatggt ttctcttgac gattgaccca tgaacacttg aaaggaaggt gtattctgcc 120 actttaaaat gaagtgcttt ataaacaaca aagagctcaa gttagctaaa actggataca 180 ggcgcagatt tattatatga atatattacg tagtggcaaa gtccaggctt ttaagacatg 240 attgggaagg tgtttatttt tectaaagaa tetaatagtg eteaegtgag ettgateaea 300 cagetggaga aatetacaga actteaetge gtgtetteat gettataeeg aceteteeea 360 tggctatcgc ctcttctcct acagcatcca gaccaagagc aatgagatgg tcatttttaa 420 gtctcaaatt ggggagtaca atcttatcat tgggggtgac aaggttttct tcaaggtctg 480 tgagaatttc cccaccctgg tgcacatcta tgccagctgg gagtcctcct caggcattgc 540 tgagttctgg gtcagtgaga agccttaggt gaggatgggg ctaaggcagg gtttctctgt 600 660 gggagcttac cccaagattg ccctgggtag cagcagggtt cctatggagg caagtttggt aagagccagt ccattgtggg agagattgga gatgtgtaca tgtgggactc tgtgctgtcc 720 780 ccagaagaaa tctggtttgt gtatcaaggt atctacatca aacccaatat tctggactgg 840 cgggcattga actatacaat gcaaggttat gtggtcaccc agtcccataa atagagttga agttctgctt caacaggaca aagttactgg gaaggaaatc cccaacatga aagaccagct 9.00 ctgaagacaa ttctacttca tgccttatgt ctatttctct gttttctctg aatttcctat 960 1012 ctattgaact gcttaattta caataaaagt acaatgcctt ctaaaaaaaa aa

```
<210> 5916
<211> 1832
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (294)...(1441)
<223> similar to gi2828790 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5916
caagatgete agetageaga getgaettee tgecacaaag tagtgtggee teacagtegt 60
cttetgaagg caagetgget acaaaaggtg acagetegga gagggagaga agggagcaaa 120
```

```
atttacctgc acgtcccagc agggctcctg tgagtatttg tggtggtggg gaaaacacct
                                                                      180
caaagagtgc agaggaacct gtggtcaggc ccaaaatcag aaacctggca agtccaaact
                                                                      240
                                                                      300
gegtgaaacc aaaaattttt tttgatactg atgatgatga egatatgeca cacagtactt
ccaggtggag ggataccgcc aatgacaatg agggccactc ggatggcctg gcaagaagag
                                                                      360
ggagaggcga gagttcaagt ggctatcccg agccaaagta ccctgaagac aaacgggaag
                                                                      420
                                                                      480
cqaqqaqtqa ccaagtgaaa ccagaaaagg tgccgagacg acgacgcacc atggccgacc
                                                                      540
ctgacttctg gacgcacagt gatgattact acaaatactg cgacgaagac tctgacagtg
                                                                      600
acaaagagtg gattgetget etgegtegga aatategaag eegagageaa accetgteet
ccagtggcga aagctgggag actctgccgg ggaaagaaga gcgggaacct ccacaggcta
                                                                      660
aggtgagtge cageactgge accagecetg geoceggtge tagtgecagt geoggggetg
                                                                      7.20
                                                                      780
gcgccggggc cagtgctggc agcaatggca gcaattacct tgaagaagtt cgagaaccat
                                                                      840
ctcttcagga agagcaggca tccctggaag aaggagaaat tccttggctc cagtaccatg
agaatgacag tagcagtgag ggggataatg attctggtca cgagttgatg caacctgggg
                                                                      900
                                                                      960
tattcatgct ggatggaaac aacaaccttg aagatgactc cagtgtgagc gaagacctag
                                                                     1020
aagtggattg gagcctcttt gatggatttg cagatgggtt aggagtggct gaagccattt
cctatgtgga ccctcagttc ctcacctaca tggcacttga agaacgcctg gcccaggcaa
                                                                     1080
                                                                     1140
tggaaactgc ccttgcgcac ttggagtctc tcgcagtgga tgtagaggtg gccaatccac
                                                                     1200
cagcaagcaa ggagagcatt gacgctcttc ccgagatcct ggtcactgaa gatcatggcg
cagttggtca ggagatgtgc tgccccatct gctgtagcga atatgtgaag ggggaggtgg
                                                                     1260
                                                                     1320
caactgaget geegtgeeac caetatttee acaageegtg tgtgteeate tggetteaga
                                                                     1380
agtcaggcae etgeceegtg tgeegetgea tgtteeetee eecactetaa agaccaagge
                                                                     1440
cgtttactcc tggtctgatt attttcccca tctgaaatcc acaatactgc aggagccctc
ttgaaattaa caatggaaat aaaaccaatc agtcagttag cctaaaccta ttgattcctc
                                                                     1500
gtgattattt ccaatgtgaa aacagttgtg tatgattgca ttaaaaatca tatcatcttt
                                                                     1560
tagaggttag aaaagggaaa actaaacttt ctaaatgcta cttgagattg cagtaagaag
                                                                     1620
atacgttttc taacctgaaa gttaaatcgc atttgttttc ttcagtagaa tgggaatgtg
                                                                     1680
ttgctgttac ttgtaatgtc aagtttatct gttaaatatg tccaaaaggc aaaatcattt
                                                                     1740
ttgttgcatg ttatgggtcg atgttcctgt aattgcagtg ccgtaaaagc ttattaaagt
                                                                     1800
                                                                     1832
tgttcttttg gttttacatg gtaaaaaaa aa
```

```
<210> 5917
<211> 1286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (802)...(1132)
<223> similar to gi5104682 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5917
                                                                       60
tttttttttt ttaaccaaat atgaaaatgt gttttatttc tcagtacaaa gccagatact
gtaaggetat gaaaaactga ctagecagag gecagaaagg acaaaaagaa gactatetet
                                                                      120
ggcctggtgc cctgtgatct ggcgtggtgt cacaggaggt ctggggacag cagcaaagac
                                                                      180
ctggaceggt ggaggtggat gagggaagcg atctgccagc ccttccagcc tcccgcggct
                                                                      240
ggggcetgág gatéctgéét gcetttgggg gcéactggtt gcetggéétg getggtteca
                                                                      300
ggaatgaact gggagaggac aggaggtgca gggaggggc gggggtggga ggcgtgaccc
                                                                      360
tttttgcacg ggaagetetg ttttcattcc gtgccacagg tgagtgtgca gggctagagt
                                                                      420
tgagaatgaa actagggtgc tgttgccccc aaaggtacct tcagtccctc taccacatcc
                                                                      480
```

```
540
cagttagaaa gtottgagoo ottggacagg cagacatggg cotgggactt aaggotgtag
                                                                 600
gaggtgaggc tgtagtgaca ggggtgggag gtgaggccgt agtgacaggg gtgggaggtg
aggctgtagt gacgggtatg gggcggagct gagaggaatg tgtgcggcaa cagacgtgag
                                                                 660
ggtgtttctc caaggagttg tggatcctct tcagtgtcag gggagcgtgg gcatgtgtga
                                                                 720
gggctcaggc ctcgccctcc tctccactgt catgcacgct ggcctgtctc accaccttcc
                                                                 780
ggaacctggg cgtagaggaa atgcagggct ctccctgccc ctgcccctgc ccctgctcct
                                                                 840
                                                                 900
gctcctggaa ggcctgggtc cggttggcca ccacggcact gccctggagg gtaaccactg
                                                                 960
actggcggga cttcagggca ggctgaggcc ccctgtccac ctgctggcct cccttggtcc
                                                                1020
1080
cctctggcat gtcactggtc tctgaggtgc tctccagctc caaggagggc tccagaagac
                                                                1140
tgatggacct catgacccct cggaggttta tacgtggccg tggcccaggc tcttctttcg
gggctgcctg gctctcttcc atgcctacaa ccttctcctc cccaccaccc tcaggttctg
                                                                1200
                                                                1260
qcqqaaqagg tgggaatggt gtagagactt caggggctgg gtgctcctct ggggagaccc
                                                                1286
caccacgaa ttccaccaca ctggac
```

```
<210> 5918
<211> 2073
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (321)...(1127)
<223> similar to gi2690100 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5918
                                                                       60
aaatgatgga agaaattgaa aatgcaatta acacttttaa agaagagcag aggttgatat
                                                                      120
atqaaqaqct aattaaagaa gagaagacaa ctaataatga gttgagtgcc atatcaagaa
                                                                      180
aaattgacac atgggctttg ggtaattcag aaacagagaa agctttcaga gcaatctcaa
gcaaagttcc tgtagacaaa gtaacaccaa gtactcttcc agaagaggta ctagattttg
                                                                      240
                                                                      300
aaaaatteet teageaaaca ggagggegae aaggtgeetg ggatgattat gateaecaga
                                                                      360
actttgtaaa ggtgagaaac aaacataaag ggaagccaac atttatggaa gaagttctag
                                                                      420
aacacettee tggaaaaaca caagatgaag tteaacagea tgaaaaatgg tateaaaagt
ttctggctct agaagaaaga aaaaaagagt caattcagat ttggaaaact aaaaagcagc
                                                                      480
                                                                      540
aaaaaaggga ggaaattttc aagttaaagg aaaaggcaga caacacacct. gtgctttttc
ataataaaca agaggataat caaaagcaaa aagaggaaca aagaaagaaa cagaaattgg
                                                                      600
                                                                      660
cagttgaagc ttggaagaaa cagaaaagta tagaaatgtc aatgaaatgt gcttcccagt
                                                                      720
taaaagaaga agaagagaaa gagaaaaaac atcagaaaga acgccagcgc cagtttaagt
                                                                      780
taaaattact actagaaagt tatacccagc agaagaaaga acaggaagaa tttttgaggc
                                                                      840
ttgaaaagga gataagggaa aaggcagaaa aggcagaaaa aaggaaaaat gctgctgatg
                                                                      900
aaatttccag atttcaagaa agagatttac ataaacttga actgaaaatt ctagatagac
                                                                      960
aggcaaagga agatgaaaag tcacaaaaac aaagaagact ggcaaaatta aaagaaaagg
                                                                     1020
ttgaaaacaa tgttagtaga gatccctcta ggctttacaa acccaccaaa ggttgggaag
                                                                     1080
aacqaaccaa aaagatagga ccaacagget etgggecaet tetacatate ecacataggg
ctattccaac ctggagacaa ggaatacaga gaagagtatg agataatcaa attgctactc
                                                                     1140
                                                                     1200
agttgataag aatgttaaca tactaagtta taccagggag agagtgacta accacattct
                                                                     1260
ttaaatatca atagcttagt cagattgatt attgtgctat attgtgaatt gagaggtatt
aagtttcatg aggetttgte attagtatte etgettetae caagaaggta tttaatatat
                                                                     1320
gtgttggcct attattgatg taaaagttat ttaaataagt taatgttaga aacattattc
                                                                     1380
```

```
aatttaaata ctgaaaacat ttcaaagaga ttttgttttt gttatagcat agcaaagtaa
                                                                     1440
attggaacaa tcattccaat gacatttttt taaaccaaaa tttttgtaac ttttataact
                                                                     1500
tggagttaag ttagcttgag taacaaaaag gtaaagtggt ttttgtttag agttaacgaa
                                                                     1560
atgttagtac tttttctaat gtttaaccaa attggcagtt tgtcagttat gacatttttg
                                                                     1620
tgtaataaat attttgtatt tgtttgaagc atgctttgtt ttatatagag aatatttatt
                                                                     1680
                                                                     1740
ttaaaaatat gtctctcata taccctatta attgtattat tgatataatc tttttggttt
ccttcagcaa ttccaaattt tccttcagcc tttctggatt tcacagattt ataaaatctt
                                                                     1800
tgtgtctttc acatcttcct ggctaatgca gttttctttt ctgcttctgt ttgcctcaaa
                                                                     1860
ataggaaaat totttgttot gaaacatoat otgaaataag coagotttaa aatactgtga
                                                                     1920
tttctcttga tggcacttaa aatgttttag gtggggcatg gtggctcatg cttgtaatcc
                                                                     1980
cagcactttc agaggtcaag gtaggagaat tgaggcctgg agtttgacac tagcctgggc
                                                                     2040
                                                                     2073
aacacaggga gaccctgtct ctacagaaaa aaa
```

```
<210> 5919
<211> 873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (559)...(665)
<223> similar to gi1335199 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5919
                                                                       60
acctagetgt gteeccacaa ggeggaaagg ggeaaacaag tteecteagg ceactettae
ggggcattaa tecetgaett aateacetee taaaaagggt gteetettga caetateaca
                                                                      120
ttatggatta gggttcaacc tatgaattac gtaggcacag acacattcag atcctggcac
                                                                      180
tacatqtaqq atattcaqtt agcccctggt tgaggggcgt ttgtgttgct actggttttc
                                                                      240
tgctattaca cataaccett taatgaattg cettaegeat geatgttttt gagtgttegt
                                                                      300
cagtetetet ttggaataga eteceagaag tggaattget gagteaaagg gtaaatgeat
                                                                      360
                                                                      420
acggaatttt gattgatacg gccacttccc atccatgggg gttttactgt tttatattcc
egecageagt gaatgagtac cettttttee ecaacagagt attttgteaa attttteaat
                                                                      480
ttttgcaggc ttatagatga gaagtgatat tatctcactg tacttctaat tgcatttctc
                                                                      540
tetttteatg tggttaagag ceatttgtat tttetgtgaa etatttaace tatttteta
                                                                      600
tagaattttt ggtctttttc aaccattttc agctctttgt atáctággaa táttaaccct
                                                                      660
ttgtaatgtt tgttgtacat atttttccca atttgtcatt tatcttttca cttggtttct
                                                                      720
                                                                      780
gcaaagattt actttatttc tgtgttaaat gtgttgattt tttcttattg cttctggatt
                                                                      840
ttagagtcat aggaaggttt tcttcattcc cagcttttac aggaatttat cgtgtttttt
                                                                      873
tcaggcagac ttttatagtt tctggtttta cat
```

```
<210> 5920
<211> 1470
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (668)...(1281)
<223> similar to gi53797 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5920
                                                                      60
ttttttttt ttctgggggc tgcttttatg gggacgacct gacagagggc atggtccgta
caaaaccggg aacaatacat acatatatat attatataca gagatgcggc cctcccgacg
                                                                     120
                                                                     180
gctgggcagg ggtggccgct ggcccaagca gcccgaagcg gccccgccca cccggttccg
                                                                     240
decetecat etgeegggt gaagtgegeg ageceaggae tgagaeagee ageteettea
                                                                     300
ggggatgggg gcacatctgg ggataggaag gggtggggac aagaaatact gatcgaagtc
                                                                     360
atggtctatt tacaggggac aagaagccaa aacggatggg atgggttggtc tgtttttaaa
                                                                     420
aaatgaacaa aaacccagtt agggcagggg catgaagtgg caaaatgaga tggattttga
                                                                     480
aaggggaggg gacctggggg aggtggtctc acctcccttg gtccaagccc caatttgggg
                                                                     540
ttaaagtggg gaaacagagt cgatttcact tagaaggcag gctgccagca gggcagccct
ggtctccaaa aagatgagta gtagtaaaat tttgccctcc agtcaaaaca ttggaaaacc
                                                                     600
agtagggggt gggggcgagg ctgactccct gcaatgtcag taggcttcca ggcatcgccc
                                                                     660
tgggctgggc agacagggca gcacaggata ggacctgact ctccagggag aaatgttccc
                                                                     720
                                                                     780
cttgcctaag accagggtcg ctgtagccag accccctttc ctccctggca ttcccaggct
tgaccaggaa acctggaccc cagagaggcc acataacagt tccaagacga ggttatggct
                                                                      840
atttggcacc tggaagaggg gaggcacaag gagaaattga gggctgctgc cccaggcaat
                                                                      900
ggggagetgg ggaccaggtg teetgaacte teeettttte ecaeteteae teeecetttt
                                                                      960
cccgaaggac acatgagaaa tcagtgcagg gccagggcca ggcccagcct ccgggctctg
                                                                     1020
                                                                     1080
gggtggactc tatccctccc aggacaggga acagggatgg gggaggtgtt gaggcaacgc
ccccaccccc caggegggag ggtcagaatg caacagagac ggcacaatga tggggggaga
                                                                     1140
gggaagggcc gagaaggtag aatctcaagt caagaggccc aggggccacc caggtgcccc
                                                                     1200
                                                                     1260
atgggcaggg agcagecece agttggcaga tgetgggaga gececagece egttecagte
                                                                     1320
cagagacaaa agctggagtg tgtaaagtct ggcagtttga tctgcaggtg cttgtgtccg
tegaceacea ggecageeet eggectetgt geeteageee catggggeaa
                                                                     1380
                                                                     1440
gaaagagget geeettetag eeacetetgt etgeeeagge catettaagg gggeetgtat
                                                                     1470
atageeggeg etggtegace gggaateegg
```

```
<210> 5921
<211> 3595
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (287)...(2913)
<223> similar to gi4754060 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5921
gggcagtgtc tcgtttgcag tcggcgcttt aggggaactg tcttcctccg caggcgcgag 60
gctgggtaca gggtctattg tctgtggttg actccgtact ttggtctgag gccttcggga 120
```

```
getttecega ggeagttage agaageegea geggeegeee eegeeegtet eetetgteee
                                                                      180
                                                                      240
tgggcccggg agggaccaac ttggcgtcac gcccctcagc ggtcgccact ctcttctctg
ttgttgggtc cgcatcgtat tcccggaatc agacggtgcc ccatagatgg ccagctttcc
                                                                      300
cccgagggtc aacgagaaag agatcgtgag attacgtact ataggtgaac ttttagctcc
                                                                      360
                                                                      420
tgcagctcct tttgacaaga aatgtggtcg tgaaaattgg actgttgctt ttgctccaga
tggttcatac tttgcttggt cacaaggaca tcgcacagta aagcttgttc cgtggtccca
                                                                      480
                                                                      540
gtgccttcag aactttctct tgcatggcac caagaatgtt accaattcaa gcagtttaag
                                                                      600
attgccaaga caaaatagtg atggtggtca gaaaaataag cctcgtgaac atattataga
ctgtggagat atagtctgga gtcttgcttt tgggtcatca gttccagaaa aacagagtcg
                                                                      660
                                                                      720
ctqtqtaaat atagaatggc atcgcttcag atttggacaa gatcagctac ttcttgctac
                                                                      780
aqqqttqaac agtgggcgta tcaaaatatg ggatgtatat acaggaaaac tcctccttaa
cttggtagat catactggag tggtcagaga tttaactttt gctccagatg gaagcttgat
                                                                      840
cctggtgtca gcttcaagag acaaaactct cagagtatgg gacctgagag atgatggaaa
                                                                      900
                                                                      960
ccatgatgaa agtattgagg ggtcatcaga attgggtgta ccagctgtgc attctctcct
                                                                     1020
gactetteta tgetgtgtte agteggagee agtaaageag tggtggeage aatattggtg
                                                                     1080
tgattgaggt tatgctggca ccactcgcac acaggcgcca caatggtgtt aagctgggca
gaaagagtgg catctctggc taccgggctg ggggcgacct ttaccatagg atgaagtaac
                                                                     1140
                                                                     1200
cttgcattcg tgctgcaagg tgtactgtac gtacacaggt gctggtcgat gtccactttc
                                                                     1260
tgcttttctt tctttcttt tttcttttt aaagtaattt cccccacagt aaaataccac
                                                                     1320
tgactcctga gtaaattgat tttccagttt tatggaattg ggagtctgac aagtgaaacc
                                                                     1380
aatttaatgt aaagtatttg gctttcaaat ggtttctctg tgctattttt tggaattctt
                                                                     1440
tcagattcca gagatatctt acgtctttga ttcaatttaa aatttgtact tattttcttt
tagaaataat gtattgtgtc tgtgcagaaa aaaaaaaaac caaaaaggat tgctttactc
                                                                     1500
                                                                     1560
caaqaqqaqa gattqtctta ggataaacct ccaagctcac atttaatata acagactgaa
gtaaacatta gaatcctgtt tagagctatt ctgcacagtt aactactgat ctttagaatc
                                                                     1620
                                                                     1680
taaaattgta tatgaactta ttcttaaata attgacccgt tttatattca aatgacttat
                                                                     1740
gatcgtggtt agtttgggaa aaataagatg gttaaatttt gatttattga aatgtaattg
                                                                     1800
tattattttc ataaaatagc attttcattt tgtaatgtgg tttaacatcc ttgttgtttg
                                                                     1860
ccaaagaaat ttcatttggc tgtgaatatt ctatttgctt gcagtatctg tttctcttcc
                                                                     1920
taggeteaag ttggtgacee aageetattg taaacaagtg attateteaa agggagatge
caatggagta acaatttgtt aaccttacgt tttctgtctg tatatttttt taaaaatctg
                                                                     1980
gtagtttctg gaaaaaaaag agaagggggt ttgtagtact taaccctatt tatttccgta
                                                                     2040
                                                                     2100
tattttagtt aattagtttt tggaataaat ggatttcagt atagctttgt ggttaaattg
                                                                     2160
cattgeettt attttatgtt taggettatt tttaaattaa catttaacag aaacatttga
aatagaattt gcatgtctgc cttaattaac ttaaagactg attttaatct gactatgaca
                                                                     2220
ctgagcatat tctttaaatt actcataatt tataatgctt aatataatct taattaaatt
                                                                     2280
                                                                     2340
tagcagtttt agtataagat gtgccatttt gtcctctgta tgtctgaatg aagctataac
                                                                     2400
atttgccttt ttattgcagg ttttcctttg gaatatggat aaatacacca tgatacggaa
                                                                     2460
actagaagga catcaccatg atgtggtagc ttgtgacttt tctcctgatg gagcattact
                                                                     2520
ggctactgca tcttatgata ctcgagtata tatctgggat ccacataatg gagacattct
gatggaattt gggcacctgt ttcccccacc tactccaata tttgctggag gagcaaatga
                                                                     2580
ccggtgggta cgatctgtat cttttagcca tgatggactg catgttgcaa gccttgctga
                                                                     2640
tgataaaatg gtgaggttct ggagaattga tgaggattat ccagtgcaag ttgcaccttt
                                                                     2700
                                                                     2760
gagcaatggt ctttgctgtg ccttctctac tgatggcagt gttttagctg ctgggacaca
                                                                     2820
tgacggaagt gtgtattttt gggccactcc acggcaggtc cctagcctgc aacatttatg
                                                                     2880
tegeatgtea ateegaagag tgatgeecae eeaagaagtt eaggagetge egatteette
                                                                     2940
caagettttg gagtttetet egtategtat ttagaagatt etgeetteee tagtagtagg
                                                                     3000
gactgacaga atacacttaa cacaaacctc aagctttact gacttcaatt atctgttttt
                                                                     3060
aaagacgtag aagatttatt taatttgata tgttcttgta ctgcattttg atcagttgag
cttttaaaat attatttata gacaatagaa gtatttctga acatatcaaa tataaatttt
                                                                     3120
tttaaagate taaetgtgaa aacatacata eetgtacata tttagatata agetgetata
                                                                     3180
tgttgaatgg accettttge ttttctgatt tttagttctg acatgtatat attgcttcag
                                                                    ,3240
                                                                     3300
tagagccaca atatqtatct ttgctgtaaa qtqcaaggaa attttaaatt ctgggacact
                                                                     3360
gagttagatg gtaaatactg acttacgaaa gttgaattgg gtgaggcggg caaatcacct
                                                                     3420
gaggtcagca gtttgagact agcctggcaa acatgatgaa accctgtctc tactaaaaat
acaaaaaaa aaaaaattac ccaggcgggg gggggcacac ctgtagtcct agctacttgg
                                                                     3480
gaggetgagg caggaaaatt gettgaacee aggaggggga ggttgeagta agceaagate
                                                                     3540
```

```
<210> 5922
<211> 1011
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (420)...(65)
<223> similar to gi168459 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5922
cgggctggaa cagagcagcc ggcctctgtc ctaagactgg ccacgctgag acggacaggc
agcaggggag cgaccggagc tggggcgctg gatgtgggga aagggagaga ggtgttaggg
                                                                      120
                                                                      180
aggccccag tetegggccc aggttacaag gtettaccet ggggtgggaa cccaggaggt
ggagtggctg gggggcacag ctgagaagtt caggaagatg gaggatgagg attcccaggt
                                                                      240
tectecetgt ceatgicagg gtgaggggtg caggageaca gaggeeatge tetgecatgg
                                                                      300
                                                                      360
ctggggactt ccttgtgaat actgcagccc tagggctgca aggggacacc acgcacagag
acacggcagg ccccgtgttg gccgggggtg ggggtgaggg cagaaccagc cgagggacgc
                                                                      420
                                                                      480
tgagtcagac cgcttgccca ctgctctggt gcagggacct ggctgcaggt gctggagacc
                                                                      540
ateggtgtgc tggcggtcat tgccaatggg atggtcattg cettcacate tgagttcate
ccccgagtgg tctacaagta ccgctatagc ccatgcctga aagaaggcaa ctctactgtc
                                                                      600
gactgcctca agggctacgt caaccacage ctgtccgtct tccacaccaa ggacttccag
                                                                      660
                                                                      720
gaccctgatg ggattgaggg ctcagaaaac gtgactctgt gcaggtttgg aactccccat
                                                                      780
cccccaagaa tgccctctga actcctgacc cctgacctca ggtacttcct taccccagat
acagggacta ccgcaatccc cccgattaca acttctccga gcagttctgg ttcctcctgg
                                                                      840
ccatccgcct ggccttcgtc atcctctttg agcacgtggc cttgtgcatc aagctcatcg
                                                                      900
                                                                      960
ccgcctggtt cgtgcccgac atccctcagt cggtgaagaa caaggttetg gaggtgaagt
accagagget gegtgagaag atgtggeatg gaaggeacag geatgegttg g
                                                                     1011
```

```
<210> 5923
<211> 911
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(912)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (336)...(684)
<223> similar to gi5105617 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5923
                                                                       60
tttccggagc ccgcccctc cggggagnag gaggagggc ggcgggggaa gggagggcgg
gtggagggt cgggaggaac ggggggcggg aaagatccgc cgggccgccg acacggcggc
                                                                      120
                                                                      180
accegeegee gggttgaate eteegggegg actgegegga ecceaecegt ttacetetta
                                                                      240
acggittcac geoctetiga actetetett caaagitett ticaactite cettacggia
cttgttgact atcggtctcg tgccggtatt tagccttaga tggagtttac cacccgcttt
                                                                      300
                                                                      360
gggctgcatt cccaagcaac ccgactccgg gaagacccgg gcccggcgcg ccgggggccg
                                                                      420
ctaccggcct cacaccgtcc acgggctggg cctcgatcag aaggacttgg gcccccacg
                                                                      480
ageggegeg gggageggt etteegtaeg ceacatgtee egegeeeege egeggggegg
                                                                      540
ggatteggeg etgggetett ecetgtteae tegeegttae tgagggaate etggttagtt
                                                                      600
tetttteete egetgaetaa tatgettaaa tteagegggt egecaegtet getegtgeeg
                                                                      660
aatteggeae gaaetgtgat geeettagat gteegggget geaegegege tacaetgaet
ggeteagegt gtgeetaeee taegeeggea ggegegggta accegttgaa ceceattegt
                                                                      720
gatggggatc ggggattgca attattcccc atgaacgagg aattcccagt aagtgcgggt
                                                                      780
cataagettg cgttgattaa ggtgcatgac accacacccg gctaattttt gtatttttag
                                                                      840
                                                                      900
tagagacagg gtttcaccat gttggccagg atggtctaga tctcttgacc tcgtgatccg
                                                                      911
ccttcctcgg c
```

```
<210> 5924
<211> 1041
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (53)...(40)
<223> similar to gil710367 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<400> 5924 60 tggggcaagg atttcatgag catcctcctc taaacgcgtg tcaagacaaa agatgcttca getttggaaa ettgttetee tgtgeggegt geteaetggg aceteagagt etettettga 120 caatcttggc aatgacctaa gcaatgtcgt ggataagctg gaacctgttc ttcacgaggg 180 acttgagaca gttgacaata ctcttaaagg catccttgag aaactgaagg tcgacctagg 240 agtgetteag aaateeagtg ettggeaact ggeeaageag aaggeeeagg aagetgagaa 300 attgctgaac aatgtcattt ctaagctgct tccaactaac acggacattt ttgggttgaa 360 aatcagcaac teceteatee tggatgteaa agetgaaceg ategatgatg geaaaggeet 420 taacctgage tteectgtea cegegaatgt caetgaggee gggeecatea ttgaccagat 480 tatcaacact gagageetee ttggaeetee tgaeegeagt cacaattgaa actgateece 540 agacacca tectgttgee ggaetgggag aatgegeeag agacecaace ageateteae 600 tttgcttgct ggacaaacac agccaaatca tcaacaagtt cgtgaatagc gtgatcaaca 660 egetgaaaag cactgtatee teeetgetge agaaggagat atgteeactg ateegeatet 720. 780 teatecacte cetggatgtg aatgteatte ageaggtegt egataateet cageacaaaa cccagctgca aaccctcatc tgaagaggac gaatgaggag gaccactgtg gtgcatgctg 840 attggttccc agtggcttgc cccacccct tatagcatct ccctccagga agctgctgcc 900

```
accacctaac cagcgtgaaa gcctgagtcc caccagaagg accttcccag ataccccttc 960 tcctcacagt cagaacagca gcctctacac atgttgtcct gcccctggca àtaaaggccc 1020 atttctgcac caaaaaaaaa a 1041
```

```
<210> 5925
<211> 2257
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1983)...(483)
<223> similar to gi5532485 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5925 tttttttttt ttaaatattt gaattttatt ttcgttttgt tttacaactg tggaacactc 60 agataateta taccatgtta gtatteetae aagagaaaae gggtaaaaca gtatttagaa 120 agcagtaccc agtaaaacgt tattacaagc cattagatgt gtttaaaaag ttgataccta 180 atttataacc ctgtaattgg taaatggtgc atgacttaaa tgttaaaatc ctgtatttta 240 aggatagtet tetgeagtta caaateeeat atacceagat tteetgtagg etteacaaat 300 cggaggggta catagaatgt gcaagagtca aaggataaat aatattataa atatatatta 360 actatattac ctaattaaaa ccataatctg ttaatacagc tatggattaa tttcaaaaaa 420 atgtaatcaa atatattact aatggtgtag ttggctgttt tccaatgttg gtaaagttat 480 taaagttett caettteata gagteeagat tgagetgeea aaegetgaaa tteteettet . 540 gggttaaaag cttgttttac attcaaacct ttcccattaa gtgctaaata tttgctgaat 600 · gttggtcgaa cccgtaactg cttaggagct ggaagagttt ggtttggacg tgccgtaacg 660 totaatottg tgttacatgt agtcactcca gcttcattaa ctgctgacac agtataccac 720 780 tataagetta tteggteagt gttgaattgt accattteat tatttetttt ceagaaaage 840 tttggtggag gtatagccga gatctggcat tctagtttca ctgaatctcc ctctaaaact . 900 tttttgctct gtggtttgta gataaacatt ggtgctcttt tatgttcttt tgcaaggaca 960 tecagetgea cagtgaaggt ggetteteet getetattet tggeaacaca tgeataagee 1020 cctgcatctg aagctctgac tacttcaaag atgagtgaat gaagaccctt ctcagacact 1080 atcattttgt gcaaatcatc tgattgaact gttcttccat ttagatacca tgacacatca 1140 ggagctggca gtccactcac tttgaagtcc attctgcaga atcttccttc atcaatcgac 1200 atgttetetg geactigaat gaaacgtggt gggtaaaatt teteetggat tgeateetga 1260 teatteacat eteceetiga ggitgateta ettettaett gigatgiagg aactigeagt 1320 egegeatgtt etgagttgtg ttgetgegag tettgtgeac caetgteate etgagettga 1380 aacacagcag ctgcattctg tggtcctagc aatctgcgag ccatcttctc ttcatatgtt 1440 agacgttgat ttccattatg aagaagggtg tccttgcatt tcagctttct ttccaaatct 1500 tgaatcaaag cttcttttga tccttgtatt tcatgatcag gagttcttgg tatgggctta 1560 accatttgca gtttgggatg gctttgccat ttatagggtt ggcccagctg aggactgttg 1620 atagttggaa tccatagcgg aagggatttt actgctattg taatcaggct gtgatggtaa 1680 tatggagctg aggaagctgg ctggggactg gttataggtg gttgtaaccc tttggcctgg 1740 gttggagcca gcatgctgct ggggagaagc agggaaagca gaggaggaca tggtgatgtg 1800 agageteagt gttgaggagg cagaaaatet ttgetetgta caetggeggg getggatgat 1860 aatggaagac tgtttggtct ggctagagaa gctggaggtt tctggtccag gaggctgcaa 1920 tetggageca catgggtttt gggactggat gaagtgtttt ggacgttegt agttaaacat 1980 gcttagttgg tatatggaag atgaaggcaa attattacta taatgatttg ttcctggaag 2040

```
ggtggggcc tgaatttggg gccacaagcc tggaattacg gaaggttgta aggaatcaga 2100 agcaaccttg gtctgctctt ccttgttgag atcctgagaa tactgtgctc ctggctttgg 2160 tagagtgacc ttctcttgaa gaatattgtt cccgtagttc cagagggtgc cagctgggtt 2220 taacccacta ttgaagggaa ggaagaggca tctcctt 2257
```

```
<210> 5926
<211> 1297
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (179)...(753)
<223> similar to gi1841555 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5926
eggaegegtg ggeaageeag gaaggeeetg gagaateegg tgtgeeeeet eeteeggeag
                                                                       60
agettgggee tgggeteaeg aggaagggge tgeagttete caaggattee egeetgetee
                                                                      120
cagacccccg ggagtcgtag gaacccgttc ctggacgctg acgtcggctt tcagggatcc
                                                                      180
etegeeggae geegeggagg gaeagageet gggaageegt egeeeegee egteeeegee
                                                                      240
ecegegegea gtgggeeegg ggegetgaga eeegegtaga geaaagegea aggteeeage
                                                                      300
gccccttgga tcctcggtgg cagggtccgg gcaagtgtca ttgcgagggt tcaggaagcc
                                                                      360
ceggeetgtg ategtgageg gaaaccccte etggagttte eccaaagcca tggacagcce
                                                                      420
tagtettegt gagetteaac ageetetget ggagggeaca gaatgtgaga eceetgeeca
                                                                      480
gaageetgge aggeatgage tggggteece ettaagagag atageetttg eegagteect
                                                                      540
gaggggtttg cagtteetgt cacegeetet teeeteegtg agegetggee tgggggaace
                                                                      600
aaggeeeet gatgttgagg acatgteate cagtgacagt gacteggact gggatggagg
                                                                      660
cagcogtett teaccattte taccocaega ceacctegge ttggetgtet tetecatget
                                                                      720
gtgttgtttc tggcccgttg gcatcgctgc cttctgtcta gcccagaagc atccccagtg
                                                                      780
cctgacctat agtaggtgct acgtatctgc ttttggaata catgcatgaa tgaatgaatg
                                                                      840
ggtatgttgg gtgggggagg gaccagggga agggtctggg actgagggga tgcctgggtc
                                                                      900
actgctgccc actgcctcta cagaccaaca aggcttgggc caagggggac atccaggggg
                                                                      960
caggggccgc ctcccgccgt gccttcctgc tgggggtcct cgccgtcggg ctgggcgtgt
                                                                     1020
gcacgtatgc ggctgccctg gtgaccctgg ccgcctacct tgcctcccga gacccgccct
                                                                     1080
agttgcccct acagecetea etgtgaacee tgaggeegge ageceageaa atetgtggge
                                                                     1140
agagagtgga gaatcttggt ggatgaggct gcggcggcgg caggagcatc tagaaacggg
                                                                     1200
agegagetgg aetggaacee tteccettee tggecaeege tettegggeg geageaacet
                                                                     1260
gagattaaac accagacacc cttgcagcca aaaaaaa
                                                                     1297
```

```
<210> 5927
<211> 2548
<212> DNA
<213> Homo sapiens
```

<220>

<221> misc_feature
<222> (170)...(2039)
<223> similar to gi402649 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5927

agcegeaaac ceageggagg gegggaagaa ggaggaggee tetagggtgg tegggggaet 60 gggggccccg ccggcagagg tccctcggcc tcctgactga ctgactgcgg ccgcctccgg 120 caaggtacgc tagggagctg cctgacggga aggtgcgggg agcggacgca tggcctccgg 180 tgctttataa cccgtatata gagataattg aacaacccag gcagagggga atgcgtttta 240. gatacaaatg tgaagggcga tcagcaggca gcattccagg ggagcacagc acagacaaca 300 accgaacata cccttctatc cagattatga actattatgg aaaaggaaaa gttgagaatt 360 acattagtaa caaaagaatg acccatataa acctcatcct catgatttag ttggaaaaga 420 ctgcagagac cggctactat gaagcagaat ttggacaaga accgcagacc ttttgttttt 480 ccaaaatttt gggtattcga tgtgtgaaga aaaaagaagt aaaagaggct gataattaca 540 aggaataaag gcaggaatca atccattcga tgtcccctga aaacagctga atgatattga 600 agattgtgac ctcgatgtgg tgagactgtg gtttcgagtt tttctccctg atggacatgg 660 taatttgage gaetgetett eeteetgtgt gtetegagee eaatttatga caacegtget 720 ccaaatactg cagaattaag ggtctgtcgt gtaaacaaga attgtggaag tgtcagagga 780 ggagatgaaa tatttctact ttgtgacaaa gttcagaaag atgacataga agttcgtttt 840 gtgttgaacg attgggaagc aaaaggcatc ttttcacaag ctgatgtaca ccgtcaagta 900 gccattgttt tcaaaactcc accatattgc aaagctatca cagaacccgt aacagtaaaa 960 atgcagttgc ggagaccttc tgaccaggaa gttagtgaat ctatggattt tagatatctg 1020 ccagatgaaa aagatactta cggcaataaa gcaaagaaac aaaagacaac tctgcttttc 1080 cagaaactgt gccaggatca cgtagaaaca gggtttcgcc atgttgacca ggatggtctt 1140 gaacteetga cateaggtga tecacecace ttggcetece aaagtgetgg gattacagtt 1200 aattttcctg agagaccaag acctggtctc ctcggttcaa ttggagaagg aagatacttc 1260 aaaaaagaac caaacttgtt ttctcatgat gcagttgtga gagaaatgcc tacaggggtt 1320 tcaagtcaag cagaatccta ctatccctca cctgggccca tctcaagtgg attgtcacat 1380 catgodica tggcacctot goottottca agotggtoat cagtggcoca coccaccca 1440 egeteaggea atacaaacce actgagtagt ttttcaacaa ggacacttee ttetaatteg 1500 caaggtatcc caccattcct gagaatacct gttgggaatg atttaaatgc ttctaatgct 1560 tgcatttaca acaatgccga tgacatagtc ggaatggaag cgtcatccat gccatcagca 1620 gatttatatg gtatttetga teccaacatg etgtetaatt gttetgtgaa tatgatgaca 1680 accagcagtg acagcatggg agagactgat aatccaagac ttctgagcat gaatcttgaa 1740 aacccctcat gtaattcagt gttagaccca agagacttga gacagctcca tcagatgtcc 1800 tettecagta tgtcagcagg egecaattee aatactactg tttttgttte acaatcagat 1860 gcatttgagg gatctgactt cagttgtgca gataacagca tgataaatga gtcgggacca 1920 tcaaacagta ctaatccaaa cagtcatgtt tttgttcaag atagtcagta ttcaggtatt 1980 ggcagtatgc aaaatgagca attgagtgac tcctttccat atgaattttt tcaagtataa 2040 cttgcaagat ttaaatcctt ttaaatcttg ataccaccta tatagatgca gcattttgta 2100 tttgtctaac tggggatata atactatatt tatactgtat atataatact gactgagaat 2160 ataatactgt atttgagaat ataaaaaact tttttcaggg aagaagcata caactttgga 2220 catagegaat acaaaattgg aagetgteat aaaaagacaa eteagaggee aggegeaggg 2280 geteacacet gtaateetag eactitggga ggecaaggeg ggtggateae tigagaceag 2340 gaattcgaga ccagcctggc caacatggtg aaaccccgtc tctactaaaa atacaaaaat 2400 tagctgagca tggtggtacg tgcctgtact gtcagctact tgggaggctg aggcacaata 2460 attgtttgaa cccaggaagc agaggttgca gtgagctgag atcacaccac cgcactccag 2520 cctgggtgac agagtgagac tctgtctc 2548

```
<210> 5928
<211> 959
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (829)...(867)
<223> similar to gi2828026 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5928 60 cagagegaga ecetgtetea egaaaaacaa aaaegateaa aaageteeca aataacatgg 120 atggggacag gcgccatgaa gggctgacat gggagggaga cataggcagt ggctggcagg gggcaggtgg ggatgggggt cagggggagg aggtgcctgc tgggcctagt gtgtcatgtc 180 contecada acgocaccaa actoccactg ctocgagoog cactacatoo otgotoccca 240 gcctaggggc tgtgctgggg cctgaccctt tgtgagctct cctcagtccc agtcaagtgg 300 acctectece teceteteca cagecettge cettgtecag gecaccatea ceatcaccaa 360 caccateett gecageetgg agteceetet etteattetg tggggetaat gggggtgget 420 gtgtgggaag cctctggggt ctaccgttgg ggagctctgc atggctgagg ttgggggttc 480 tetgggaace tgtggccaag ggtetetggt cacagtgccg aggtgggcet ggetttteca 540 cagtggagtc cattgatgat tacgtgaacg ttccggagag cggggagagc gcagaagcgt 600 ctctgggtga gtgaccggtg cttgtcggtg cctgccctg cacccgctg ccccaccatg 660 eteteagtgt gaceagatee caccetgggg ctacceacae cetetgeece etetgtetgg 720 780 gegteeeett getetetege ceteetgace cetttgegtg getgeeeete ettetgatet gtececacag atggeageeg ggagtatgtg aatgtgteee aggaaetgea teetggageg 840 gctaagactg agcctggtgt gttctgcggg aggggcagga gctggggtag ctgctttggg 900 959 cttgggggga tagcttgcaa gctggagacc aacctcccct cccttacagc cgccctgag

```
<210> 5929
<211> 1424
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (280)...(1186)
<223> similar to gi4586838 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5929

ttgttgggta tcctgatgat ggcaaatgtc ttcatttatt ttattatgga agtctccaaa 60
agcagtagcc aagaaaaaa tggaaaaggg gaagtaataa tacccaaaga gaagttctgg 120
aagatatcta ccctcccga ggcatactgg aaccgagagc aagagaagct gaaccggcag 180
tacaacccca tcctgagcat gctgaccaac catacggggg aggcgggcag gctctccaat 240
ataagccatc tgaactactg cgaacctgac ctgagggtca cgtcggtggt tacgggtttt 300
aacaacttgc cggacagatt taaagacttt ctgctgtatt tgagatgccg caattattca 360
```

```
420
ctgcttatag atcagccgga taagtgtgca aagaaacctt tcttgttgct ggcgattaag
teceteacte cacattttge cagaaggeaa ggeaateegg gaateetggg gecaagaaag
                                                                      480
caacgcaggg aaccaaacgg tggtgcgagt cttcctgctg ggccagacac ccccagagga
                                                                      540
                                                                      600
caaccaccc gacctttcag atatgctgaa atttgagagt gagaagcacc aagacattct
tatgtggaac tacagagaca ctttcttcaa cttgtctctg aaggaagtgc tgtttctcag
                                                                      660
                                                                      720
gtqqqtaaqt acttcctqcc cagacactga gtttgttttc aagggcgatg acgatgtttt
                                                                      780
tgtgaacacc catcacatcc tgaattactt gaatagttta tccaagacca aagccaaaga
totottoata ggtgatgtga tocacaatgo tggacotcat cgggataaga agotgaagta
                                                                      840
ctacatccca gaagttgttt actctggcct ctacccaccc tatgcagggg gagggggtt
                                                                      900
cottotactic ggccacotgg cootgaggot gtaccatato actgacoagg tocatotota
                                                                      960
ccccattgat gacgtttata ctggaatgtg ccttcagaaa ctcggcctcg ttccagagaa
                                                                     1020
acacaaaggc ttcaggacat ttgatatcga ggagaaaaac aaaaataaca tctgctccta
                                                                     1080
tgtagatctg atgttagtac atagtagaaa acctcaagag atgattgata tttggtctca
                                                                     1140
gttgcagagt gctcatttaa aatgctaaaa tagatacaaa ctcaattttg catagaaagg
                                                                     1200
tgtattttga atagttccca tgttgtgttc tcacattata gtaatttcta tattatacca
                                                                     1260
tgaaaattgt ctttatgagt gatacccaat tgagggcctc taaacctttc tctttgttac
                                                                     1320
taaccttatc attgatagtc ttatttgttt ttttcttttt tatctctctt gtgtattctt
                                                                     1380
tcatctttat tcttactatt tgtactatct cttttatata ttcg
                                                                     1424
```

```
<210> 5930
<211> 2634
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (95)...(2042)
<223> similar to gi5901872 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5930
                                                                       60
tttcgtaaga cgacgaggag gctgcgaaaa gttaagggcc ggaccgcagg ctgtgctcgc
                                                                      120
ttccggaagt ggcttctgcg acaacatgct tgcggacctc ggcttaatcg gaaccatagg
                                                                      180
cgaggatgac gaggtgccgg tggagcccga gtctgactcc ggggacgagg aagaggaggg
gcccattgtg ctgggcagac gacaaaaagc tttggggaag aaccgcagtg ctgatttcaa
                                                                      240
ccctgatttc gttttcactg agaaggaggg gacgtacgat ggcagctggg ccctggctga
                                                                      300
tgtcatgagc caactcaaga agaagaggc agccactaca ttagatgaga agattgagaa
                                                                      360
agttcgaaag aaaaggaaaa cagaggataa agaagccaag tctgggaagt tggaaaagga
                                                                      420
                                                                      480
gaaagaagca aaggaaggct ctgaaccaaa ggagcaggaa gaccttcaag agaatgatga
ggaaggetea gaagatgaag eeteggagae tgaetaetea teagetgatg agaacateet
                                                                      540
caccaaagca gatacactca aagtaaagga toggaagaag aagaagaaga aaggacagga
                                                                      600
                                                                      660
agcaggagga ttttttgaag atgcatctca gtacgatgaa aacctctcgt tccaggacat
gaacetttee egedetette tgaaggeeat tacageeatg ggetteaage ageceacee
                                                                     . 720
gatccagaag gcgtgcatac ctgtgggtct attggggaag gacatctgtg cctgtgcagc
                                                                      780
                                                                      840
cactgggaca ggtaaaactg ccgcctttgc cctgcctgtt ttggagcgtc tgatttataa
accoegocag gotocagtoa coegogtgot ggtgotagtg cocacoegag agetgggoat
                                                                      900
ccaggtgcac tetgteacca gacagetgge ccagttetge aacateacca cetgeetgge
                                                                      960
tgtgggcggc ttggatgtga agtctcagga agcagctctt cgggcagcgc ctgacatcct
                                                                     1020
categocace ccaggoogge teategatea cotecacaac tgccottect tecacetgag
                                                                     1080
cagcatcgag gtgctcatcc tggacgaggc tgacaggatg ctggatgagt actttgagga
                                                                     1140
```

```
1200
gcagatgaag gagatcatcc gaatgtgttc ccaccaccgc cagaccatgc tcttctcggc
caccatgaca gacgaggtga aagatetgge ttetgtetee ttgaagaate etgteeggat
                                                                     1260
atttgtgaac agcaacacag atgtggctcc cttcctgcgg caggagttca tccggatccg
                                                                     1320
gcctaatcgt gaaggagacc gggaagccat cgtggcagct ttgttgacga ggaccttcac
                                                                     1380
tgaccatgtg atgctgttca cgcaaaccaa gaagcaggcc caccgcatgc acatcctcct
                                                                     1440
ggggctcatg gggctgcagg tgggtgagct ccatggcaac ttgtcacaga cgcagcggct
                                                                     1500
ggaggeeete eggegtttta aggatgaaca gattgaeate etegtggeea etgatgtgge
                                                                     1560
agcccgtgga cttgacattg agggggtcaa aacggtaatc aacttcacaa tgcctaatac
                                                                     1620
catcaaacat tatgtccacc gggtggggcg aacagcacgt gctggcaggg ctgggcgctc
                                                                     1680
agtotototg gtgggagaag atgageggaa gatgetgaag gagattgtaa aagetgecaa
                                                                     1740
                                                                     1800
ggcccctgtg aaggccagga tacttcccca agatgtcatc ctcaaattcc gggacaagat
tgagaaaatg gagaaagatg tgtatgcagt tctgcagcta gaggcggagg aaaaagagat
                                                                     1860
gcagcagtca gaagcccaga tcaatacagc aaagcggctc ctggagaagg ggaaggaggc
                                                                     1920
agtggtccaa gagcccgaga ggagctggtt ccagaccaaa gaagagagga agaaggagaa
                                                                     1980
                                                                     2040
aattgccaaa gctctgcagg aatttgactt ggccttaaga ggaaagaaga aaaggaagaa
gtttatgaag gatgccaaaa aaaaggggga gatgacagca gaggaaaggt ctcagtttga
                                                                     2100
aatcctcaag gcgcagatgt ttgctgaacg gctagcgaag aggaatcgca gagccaagcg
                                                                     2160
ggcccgagca atgcccgagg aggagccagt gagaggtcct gccaagaagc aaaagcaggg
                                                                     2220
gaagaaatet gtatttgatg aagaaeteae caacacaage aagaaggeee tgaaacagta
                                                                     2280
tegagetgge cetteetttg aagaaaggaa acagttggge ttgccccace agagacgagg
                                                                     2340
aggaaacttt aaatctaaat ccagatacaa gaggaggaag tagctgtcgt ggcctgaaga
                                                                     2400
aattcatggg ggcagccctt aaatcccttc cctgtgggaa gtcatcctgg ctggtctgtc
                                                                     2460
                                                                     2520
ttttctccat ttgtttaaaa aaaaaacaaa aacaaaaaac aacactttgg tgtggtggta
tggtacgtag ctattttcct aagcatgtct gtcaatctcc cttcttgctg attagctttc
                                                                     2580
atagactatt attaaatgga agtatttttg ggaaaagaga aaccaaaaaa aaaa
                                                                     2634
```

```
<210> 5931
<211> 897
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (889)...(162)
<223> similar to gi33724 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5931
ttttttttt ttctgattga caatgagaat atttattgag ggtttattga gtgcagggac
                                                                       60
gaagggettg atgeceetgg ggtgggagga gagaceeet eeeeegggaa teetgeaget
                                                                      120
ctagtcctcc cgtggtgggg ggtgaggggt tgagaaccta tgaacattct gtaagggccc
                                                                      180
actgtcttcc tcccacggtg ctccccttca atgcgtgacc ctggcaactg taaccttctg
                                                                      240
tgggacttcc cactgctcaa gccgtcaagc ctaagataag ctgctggccg cgtacttgtt
                                                                      300
gttgctttgt tgtggagggt gtggggggt ctccactccc gccttgacgg ggctgctatg
                                                                      360
etgeetteee aggéeacttg teaeggetee eggggtagaa gteaettatg gagaeacace
                                                                      420
agtgtggcca ttgttgggct tgaagctcct cagaggaggg ctgggaacag agtgacccga
                                                                      480
ggggagcagc cttgggctgg acctaaggac gggtaagctt ggtcccctcc gccgaatacc
                                                                      540
acatgateae tactactate ceacacetga cagtaatagt cateceteat ceatageetg
                                                                      600
tgtcccgctg atggtcaaag tggctgttgt tccagagttg gagccataga atcgtttatg
                                                                      660
gatecetgag ggeeggtege tateaceata gaegaeeage acaggggeet ggeetggett
                                                                      720
```

```
ctgctggtac cagtgcacac ttttacttgc aatgttgatt cccccacagg taatcctggc 780 cgcctttcct ggggccactg acaccgaggg tggctgagtc agcacatagg aggtcacaga 840 gcctgtgcag tgagagagga ggccgaggag gagaacggtc caggccatgg ctgaggc 897
```

```
<210> 5932
<211> 2352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (102)...(1508)
<223> similar to gi3878119 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5932 tttegtetge gegagagttt etgetegete aacegagttg tegtgttgee etegettete 60 agateceege eggaagtgaa gagageaage agatttgaae etatetgett teaagetggt 120 catcatgatg aaacttagac acaaaaataa aaagccaggt gaaggttcca agggccacaa 180 gaagataagt tggccctacc ctcagcctgc aaagcaaaat gggaagaaag caacctccaa 240 agtgccctct gcacctcatt ttgttcaccc caatgatcat gccaatcgag aggctgaatt 300 aaagaagaag tgggttgagg agatgaggga gaagcagcaa gccgcccggg agcaagaaag 360 acaaaaacgc aggaccattg agagctactg tcaggatgtc ctaagacgcc aggaggagtt 420 tġagcataag gagġaagttt tgcaggaatt aaatatgttt cctcagctgg atgacgaggc 480 cacgaggaag gettattaca aggagtteeg taaggtggtg gaatactetg atgtgattet 540 ggaagteetg gatgeeagag acceattagg etgeegetge tteeaaatgg aggaggetgt 600 cctgcgagca caaggcaaca agaagctggt cctggtcttg aacaagattg acctggtccc 660 caaggaggtt gtggagaaat ggctggatta ccttcggaat gagttgccaa ccgtggcttt 720 780 caaggccagt acccagcatc aggtcaaaaa cctgaatcgt tgcagtgtgc cagtagatca ggcctctgag tcactgctga aaagcaaagc ctgctttgga gctgaaaacc tcatgagggt 840 tctggggaac tattgccgcc ttggtgaagt gcgcacccac attcgtgtgg gtgttgtggg 900 tetteccaat gttgggaaga geageetgat caatageetg aagegeagee gegeatgeag 960 cgtgggagct gttcctggaa ttaccaaatt catgcaggag gtctacctgg acaagttcat 1020 coggetettg gatgetecag geattgtece agggeecaae teagaggtgg geaceatect 1080 gcgtaactgc gtccacgtgc agaagctggc agaccctgtg accccagtgg agaccatcct 1140 gcagcgctgc aacctggagg agatttccaa ctattatggc gtctctgggt tccagaccac 1200 tgagcacttt ctgacggcag tggcccaccg tttggggaag aagaagaagg gaggcttata 1260 tagtcaggaa caggcggcca aagctgtcct agctgactgg gtgagcggga agatcagctt 1320 ctatatacca ccaccagcca ctcacactct gcccacccat ctcagtgctg agategttaa 1380 ggaaatgacc gaggtetttg acategagga taetgageag gecaatgaag acaecatgga 1440 atgettggcc accggagaat ctgatgaget gttgggtgac acggacccac ttgaaatgga 1500 gatcaagttg ctccattctc cgatgacgaa aatagcagat gccattgaaa ataaaaccac 1560 cgtgtataag attggagate teactgggta ttgcaccaat ccgaaccgte atcagatggg 1620 gtgggctaaa cgcaatgtgg accaccgccc taagagcaac agtatggtgg atgtctgctc 1680 agtggaccgc cgctcagtgc tgcagaggat catggagacg gaccccctgc aacagggcca 1740 ggctctggca tctgccctga aaaataagaa gaagatgcag aaacgtgcag ataaaatcgc 1800 cagcaagctg tetgatteca tgatgtetge tetegacete tetggeaatg etgatgatgg 1860 tgttggtgac taatcgactg atctcacttc ccttccgctc caagcaccag ttccggtggt 1920 acgggggaat accagtgaaa tagtttggtt ctccctgaag catctgcata ttgaaagaac 1980 gettteecca etgtgtgtet teteeccete etceagtaaa aacagteecg getgggtget 2040

```
gtggctcacg tctgtaatcc cagcactttg ggaggccgag gtgggcggat cacctgaggt 2100 cgggagttcg agaccagcct ggccaacatg gtgaaaccc gtctctacta aaaatacaaa 2160 aaaatttagc cgtgcttagt ggcacctata gtcccagcta cttgggaggc tgaggcagga 2220 gaatcgcctg aacctgggag actaaggcgg gagaatcgcc tggacctggg aggcagaggt 2280 tgcagtgagc ccagacccca ccattgcact ctagcctggg caacaacccg aaactccgtc 2340 ccaaaaaaaa aa 2352
```

```
<210> 5933
<211> 1081
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (242)...(443)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5933
cgctttcggc atggaggaaa tttatgcgaa gtttgtgtcc cagaaaatca gcaaaacccg
                                                                       60
ctggcgaccg ctgcctccgg gaagtttaca gaccgcggag acgttcgcta caggatcttg
                                                                      120
ggacaatgag gaaaattata tttcactgtg gtctattgga gattttggaa acttggactc
                                                                      180
tgatggaggg tttgaaggag accatcagtt attgtgtgät atcagacacc atggtgatgt
                                                                      240
aatggattta cagttttttg accaggaaag aattgtcgct gcttcatcaa caggatgtgt
                                                                      300
aacagttttc cttcaccatc caaataacca gactctgtca gtcaaccagc agtggactac
                                                                      360
ageteactae cacacaggee etggeagtee tteetatage agtgeaceat gtacaggtgt
                                                                      420
tgtgtgcaac aacccaaaaa tcgttacagt tggagaggat ggtcgaataa atctcttcag
                                                                      480
agetgateae aaggaagetg taagaaceat agacaatgea gatagtagta caetecatge
                                                                      540
tgtaaccttt cttcgaactc ctgagattct tactgtaaat tcaattggac agttgaaaat
                                                                      600
atgggatttc agacaacaag gaaatgagcc ttctcagatt attgtcactg actggtgacc
                                                                      660
gagtgccact ccactgtgtt gatagacatc ccaaccaaca gcatgttgta gctactggtg
                                                                      720
gccaagatgg aatgttgagt atttgggatg ttagacaagg tactatgcct gtatctctgc
                                                                      780
tgaaggetca tgaagetgaa atgtgggaag tteaetttea eccatecaae ecagaacate
                                                                      840
tttttacctg ctctgaagat ggatccctct ggcactggga tgcttccaca gatgtacctg
                                                                      900
aaaagtegte actettteae caagaaaaat tetggagegg agageatgtg tggageatge
                                                                      960
atgcatgtcc atgctataac ttcatctaca gagaaacaaa cagtttcatc taaggattaa
                                                                     1020
ctaagaggaa gaagcagtac ttttttgtct catagcatta gtaaccaagc taatgttcac
                                                                     1080
                                                                     1081
```

```
<210> 5934
<211> 1898
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1868)...(611)
<223> similar to gi1842105 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 5934
cgtcgacttt ttttttttaa agtttcatag tggttctctt atttataaaa taatcacatt
                                                                     60
caagtettae cagagagtag caaagtette aatteettte ettteetttg aagaaataat
                                                                    120
gtagagcaat cactcataaa tccctctaat tataaataaa atccaagata ttatttgaca
                                                                    180
atgagatgct ttatttaaac ttgatacatt tactatataa gaattctgtg aaaaaatggg
                                                                    240
gtatgaaatt attttggatc tgaatctttg cattataaaa tctaacccaa aactatgtca
                                                                    300
360
ggcaaaacaa gacaagtttc agctgacttc cccatggtgt tacaagttct cctagtgaag
                                                                    420
taaaaagtcc caacccctct ttctatgcat gtcatctcca ggaaggtaag ctttgggaag
                                                                    480
cacctgcgcc agccctatat ctgtgcttgg catgaggttc acacaggttc ggccttgaga
                                                                    540
togggatgtt ceteteaace aaacaactet acttgaatta tteegagact cettggaggg
                                                                    600
gtgaaacttc aggcctgggt gtctctgcag tgagatgtct gtggttggta aacagttctg
                                                                    660
tagagtettg ttetactgat etttetteta ggtetgaete tgggattgta gtacaaceae
                                                                    720
ctggcatgac catggtctgg tgggggctgc tgcatcggta cttaggcaga gacggccacc
                                                                    780
tttggataat ctatcgcaga gcaaggtgat atgtttcttc agttggcttg tgtcctttgg
                                                                    840
gtatgttcaa getggetgtt gaaggttcaa aageetgete eettagaaac tettegacag
                                                                    900
                                                                    960
geaagtette caacaggtgg gaaatggegg catecacegt ttetteecag eccaattett
gagtgtcttc ttgtagcggc agaaatgccg cttccagaat agcaacctgg tcagcactaa
                                                                   1020
gettetgeca cagegegate ageagaatea ccaaatgggt ggeactette ageetggtga
                                                                   1080
atgactggaa cagattgcct tggttttcct ccactgcatc tgctagagca attacctgct
                                                                   1140
tgtaggttcc atctaacaag gtgtccaggt gttgaagagg ggcaggagtt ttatctttga
                                                                   1200
atcttgctag tagccggcgt tgaatggccc gaaattgtac agctctctca gataagagtt
                                                                   1260
cttctaattt ttcaccattt atccgtagct caaaatggat ggatccaatc aactccaaaa
                                                                   1320
tatteettga aaggggtaat agateeeega aaaagaacat geaaaatett tgaeteeetg
                                                                   1380
ttttttcaaaa tattcttgaa ggcgaagaat aagctcattg gttaatgaag cccaaagatc
                                                                   1440
cttcaaattg ttccactcct ggaatgcgaa tatccgttga agaagttttg gaagcaagaa
                                                                   1500
cagtaattcc gagcacctcc ctaagaagtg aaaacccatt acattcacct gatcatcatc
                                                                   1560
tgactgactg gcaaaacctg ggaagagact aagaagactg actggagatt tgttggtatc
                                                                   1620
aatagtaatt ttgtggcttg cagtttttga aggctgacct ggtaggcaaa ttaactttag
                                                                   1680
gggaagteta aatttacatt ggataacteg eggaatgeea teaggattte gatteataaa
                                                                   1740
ttcaaaggtg aactgatcac aagtcaattc taatggtggt tgcacgtaga ctgataattt
                                                                   1800
ggctttttgc aatatcactc tgttctgcag tgtgaccttc accgtgacag aagggacaag
                                                                   1860
gtcagttccc acctcaacat cggtcgcttg agaaactg
                                                                   1898
```

```
<210> 5935
<211> 704
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (697)...(698)
<223> similar to gi522145 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5935 60 cggcacgaga tcatctcagt gagacaggtt aactctatca cagccacaga gctgataatg cagtgagtcc cagatataaa cctcatttgt ctaatcccag agaattctct aggtgacttt 120 ttcaggataa gacacagttt tatctttatg aaaatttcct taacttttca ggagagaagg 180 ctcttatgac cgatacctac gaatggatga ctattgcagg agaaaggatg actcttattt 240 300 tgaccgttac agagataget ttgatggacg gggccctcca ggcccagaaa gtcagtctcg tgcaaaaggt aaagtagctg aaacagtcta ttcctattat tgatagaaca ctttacaaaa 360 gagagaggaa actaataacc agtaccccca tctgaaaaag ggctagtgcc ttggccaagc 420 480 agtgtataaa aagaagaaat ataagtagct tattagtggg taaagagcat ttggcttgaa aatgattttt aagatgcaaa ttagtaccat catctggttt agtcatccaa caagaagaaa 540 taaatatgaa attccagcaa taagaaatga acaaaatgct ggtcactgtg gccaccacct 600 660 gtaatectag cactttggaa ggccaaggcc ggcagatcac ttgagcccag gagttcgaga ccagcttaag caacatgata aaaccccatc tctacaaaaa aaaa 704

```
<210> 5936

<211> 2203

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (775)...(1647)

<223> similar to gil73157 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 5936 tttcgtgacc gatggagatg gcggctgcgg ctgagtgacg gacggtggag gcccagagcc 60 cgggcctgaa gggggggaca aacctgggtg cccgcaggag cccggcaggg tgtcttacaa 120 gtatcaagaa cttactatat gtggttgaat aaacaatcaa ggtaaagagc atcaagtaaa 180 aacttetget tgttgataag taetteagae atteeecag tggetgaagt ggeatatgaa 240 300 ttatgaagtt ggatcatttg gaatgaatgt aagagaattg ccaagggete ctcctactce agagaggaaa cctcatccag ggccatgaag ccacttcctc accatctgtg tgctgcttaa 360 gctaatgctg cgggaaccat ggttccttgg gaggaatcaa gctgactctt ggcatgagat 420 tectgeette etagggttga gageggeact gecatggett etetggaega eecaggggaa 480 gtgagggagg getteetetg ceetetgtge etgaaggate tgeagtettt etateagett 540 cactcacatt acgaggaaga acactcaggg gaagaccgtg atgtcaaagg gcaaattaaa 600 agtettgtee agaaggetaa aaaageaaag geeaggttgt tgaaaegaga aggggateat 660 cgagcagagt cagggaccca aggatatgag tctgtcagct atggaggggt tgatccgtac 720 atgtgggaac cccaggagcg tggtagctgt gactatgcca tctttccgac ttcaaaaaac 780 accgagctgc tagaattgac cactatgttg tggaagtcaa taaactaata atcaggttag 840 agaageteae tgeatttgae agaacaaata etgagtetge aaagattega geaatagaaa 900 agtetgtggt geettgggte aacgaccagg atgteeettt etgteeagae tgtgggaata 960 agttcagcat ccggaaccgc cgccaccact gccgcctctg cgggtctatt atgtgcaaga 1020 agtgtatgga geteateage etteeettgg caaacaaget caccagtgee ageaaggagt 1080 ccctgagcac ccacaccagc cccagccagt cacccaacag tgtccatggc tcccgccgag 1140 gcagcatcag cagcatgagc agtgtcagct cggtcctgga tgagaaggac gatgaccgga 1200 teegetgetg tacacactge aaggacacge tgeteaagag agagcagcag attgatgaga 1260 aggagcacac acctgacatc gtgaagctct acgagaaatt acgactttgc atggagaaag 1320

```
ttgaccagaa agetecagaa tacatcagga tggcagcatc attaaatget ggggagacaa
                                                                     1380
cctacagtct ggaacatgcc agtgaccttc gagtggaagt gcagaaagtg tatgagctga
                                                                     1440
                                                                     1500
tagacgettt aagtaagaag atettaaeet tgggettgaa eeaggaceet eeaceaeate
                                                                     1560
caagcaattt gcggctgcag agaatgatca gatactcagc tacacttttt gtgcaggaaa
agttgcttgg tttgatgtca ctgccaacca aagaacagtt tgaggaactg aaaaagaaaa
                                                                     1620
ggaaggagga aatggagagg aagagggccg tggagagaca agctgccctg gagtcccagc
                                                                     1680
gaaggettga ggaaaggeag agtggeetgg ettetegage ggeeaaeggg gaggtggeat
                                                                     1740
                                                                     1800
ctctccgcag gggccctgcc cccttgagaa aggctgaggg ctggctccca ctgtcaggag
gtcaggggca gagtgaggac tcagacccgc tcctccagca gatccacaac atcacatcat
                                                                     1860
tcatcaggca ggccaaggcc gcgggccgca tggatgaagt gcgcactctg caggagaacc
                                                                     1920
                                                                     1980
tgcggcagct gcaggacgag tatgaccagc agcagacaga gaaggccatc gagctgtccc
                                                                     2040
ggaggcaggc tgaggaggag gacctgcagc gggaacagct gcagatgttg cgtgaacggg
agttggaacg agaaagggag cagtttcggg tggcatccct gcacacacgg actcggtccc
                                                                     2100
                                                                     2160
tggacttcag agaaatcggc ccttttcagc tggagcccag cagagagcct cgcacccacc
                                                                     2203
ttgcttatgc tttggatcta ggctcttccc cagttccaag cac
```

```
<210> 5937
<211> 2547
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (221)...(2331)
<223> similar to gi165652 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5937
                                                                       60
aatttccggt tcgacgatcc cgtcccctgg cggagccggc gcgcccgggg tgccgctccc
                                                                      120
tgeetggege geteegeace tggaggtgee ttgeecetet eetgeecace teggaattte
cotgtggotc otttgatoct togagtotco agotcotcto cottocacct gtttccccca
                                                                      180
                                                                      240
agaaaggcag gatectggte eetgetaegt ttetggggee atggetggte tgggeeeegg
cgtaggcgat tcagaggggg gaccccggcc cctgttttgc agaaaggggg ctctgaggca
                                                                      300
                                                                      360
gaaggtggtc cacgaagtca agagccacaa gttcaccgct cgcttcttca agcagcccac
                                                                      420
cttctgcage cactgcaceg acttcatetg gggtategga aagcagggee tgcaatgtca
agtetgeage tttgtggtte ategaegatg ceacgaattt gtgaeetteg agtgteeagg
                                                                      480
cgctgggaag ggcccccaga cggacgaccc ccggaacaaa cacaagttcc gcctgcatag
                                                                      540
                                                                      600
ctacagcage eccacettet gegaceactg tggetecete etetacggge ttgtgcacea
                                                                      660
gggcatgaaa tgttcttgct gcgagatgaa cgtgcaccgg cgctgtgtgc gtagcgtgcc
                                                                      720
ctctctgtgc ggtgtggacc acaccgagcg ccgcgggcgc ctgcagctgg agatccgggc
                                                                      780
teccaeagea gatgagatee aegtaaetgt tggegaggee egtaaeetaa tteetatgga
ccccaatggt ctctctgatc cctatgtgaa actgaagctc atcccagacc ctcggaacct
                                                                      840
                                                                      900
gacgaaacag aagacccgaa cggtgaaagc cacgctaaac cctgtgtgga atgagacctt
                                                                      960
tgtgttcaac ctgaagccag gggatgtgga gcgccggctc agcgtggagg tgtgggactg
                                                                     1020
ggaccggacc tecegeaacg actteatggg ggeeatgtee tttggegtet eggagetget
                                                                     1080
caaggegeee gtggatgget ggtacaagtt actgaaccag gaggagggeg agtattacaa
                                                                     1140
tgtgeeggtg geegatgetg acaactgeag eeteeteeag aagtttgagg ettgtaacta
ccccetggaa ttgtatgage gggtgeggat gggcccctct tecteteeca tecceteece
                                                                     1200
tteccetagt eccaeegace ecaagegetg ettetteggg gegagteeag gaegettgea
                                                                     1260
catctccgac ttcagcttcc tcatggttct aggaaaaggc agttttggga aggtgatgct
                                                                     1320
```

```
ggccgagcgc aggggctctg atgagctcta cgccatcaag atcttgaaaa aggacgtgat
                                                                     1380
cgtccaggac gacgatgtgg actgcacgct ggtggagaaa cgtgtgctgg cgctgggggg
                                                                     1440
ccggggtcct ggcggccggc cccacttcct cacccagctc cactccacct tccagacccc
                                                                     1500
ggaccgcctg tatttcgtga tggagtacgt caccggggga gacttgatgt accacattca
                                                                     1560
acagetggge aagtttaagg ageeccatge agegttetae geggeagaaa tegetategg
                                                                     1620
                                                                     1680
cetettette etteacaate agggeateat etacagggae etgaagetgg acaatgtgat
gctggatgct gagggacaca tcaagatcac tgactttggc atgtgtaagg agaacgtctt
                                                                     1740
ccccgggacg acaacccgca ccttctgcgg gaccccggac tacatagccc cggagatcat
                                                                     1800
tgcctaccag ccctatggga agtctgtcga ttggtggtcc tttggagttc tgctgtatga
                                                                     1860
                                                                     1920
gatgttggca ggacagcctc ccttcgatgg ggaggacgag gaggagctgt ttcaggccat
catggaacaa actgtcacct accccaagtc gctttcccgg gaagccgtgg ccatctgcaa
                                                                     1980
ggggttcctg accaagcacc caggggaagc gcctggggct tcagggcctt gatgggggaa ^{\circ}
                                                                     2040
cctaaccatc cgtgcacatg ggttttttcc gctgggattt gactgggagc ggctggaacg
                                                                     2100
attgggagat ccccgcctcc ttttcaagac cccgcccgtg tggcccgcag cggcgaggaa
                                                                     2160
tttttgacaa gttcttcacg cgggcggcgc cagcgctgac ccctccagac cgcctagtcc
                                                                     2220
tggccagcat cgaccaggcc gatttccagg gcttcaccta cgtgaacccc gacttcgtgc
                                                                     2280
                                                                     2340
accoggatgo cogcagococ accagocoag tgootgtgoo ogtoatgtaa totoaccogo
egecactagg tgtececaae gtececteeg eegtgeegge ggeageeeca etteaeecee
                                                                     2400
aacttcacca cccctgtcc cattctagat cctgcacccc agcattccag ctctgccccc
                                                                     2460
gegggtteta gaegeeete ceaagegtte etggeettet gaactecata cageetetae
                                                                     2520
agecgteecg cgttcaagac ttgageg
                                                                     2547
```

```
<210> 5938
<211> 847
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (538)...(313)
<223> similar to gil345539 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5938
tttcgtcgca gttcggaagg acccgagtcc cttatctaac cgagagctaa caggtcgggg
                                                                       60
                                                                      120
actgcgggac ggaagaggga ggggaagatg aagaaaatcg gtgatgaatg gctggcggaa
atgattggcg gaaagaaaga gccagttcac agtgcgcctt tgtattcggc gggaaacccg
                                                                      180
gccgaagagg gagctggaaa ggactccgga atccggccgt aattccagcc aatcagggag
                                                                      240
tagagttgcg gcgcggggtt ggggcggggc agtctcgcgg gagatagttt cgcgggttcg
                                                                      300
ggaggegagt etceggttte egeceagtet etggggaege ggtggegggg tetgaatege
                                                                      360
etggetteca gggagttttg ggegggtece egcaegggag egtggeagge getggaeteg
                                                                      420
acagcagatg tggaactgga gagcttggcg cgccctcata ctttgtcaca cacctacgcc
                                                                      480
accagactgg ggtcgggccc ctccgcgttc tgctctggag ggcctgggtc tgggcccagc
                                                                      540
atagegettt tagaatetee teagetgaat etgaegetea geegtaggtg aagettagee
                                                                      600
cgctgtttca ggccccgccg atctggaagg agtgtcagag ctggagcgcg cgtggcctca
                                                                      660
teggtgttgg ggteaceeeg gggttgeeag ggeteatgga gggtegtagt etggattttg
                                                                      720
teaceceae gteeegeee egeageaagt etggggttgg agaacteaeg eggtettegt
                                                                      780
aagetacatg ccagttgace etegaggagg gatgeeeeet eeeettaage gteeaegetg
                                                                      840
                                                                      847
gagaagg
```

```
<210> 5939
<211> 1171
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (1172)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (21) . . . (2172)
<223> n = a,t,c or g
<220>
<221> misc_feature
<222> (463) . . . (973)
<223> similar to gi4406696 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5939
tttcgtgtgt gtgtgagagg gagagacgac gtgaggcgag aggaaaagtc tttagtcggc
                                                                       60
cttaaaagca aacaaatcag agatggaata agagcggtaa ttgcagcaag accgccttga
                                                                      120
ttettgeagt ceagggaget gagegeaceg egegeateeg gegaggaeag gaggegaeeg
                                                                      180
cgggcgctgc caagggctgc gggactttgg cttttcctca gtaaacaaat cttttgatta
                                                                      240
ctttgacact gtggaataaa gaagcgggga gaaggatcag gctcaccttc acccgcttca
                                                                      300
gggggattcc agcttggatg tcagattcct gaaccgtctt tgccatcgga ggaggaaaca
                                                                      360
catecacaca egegegegea caetegeaeg eteagggeea caeteaeaeg eegeeeteea
                                                                      420
cgatcacaca gcaccagact tcggttccct atgcccctgg atggtgacgg cggattggca
                                                                      480
tettggaage gatgegagag egataagget ggegeeggee egeaaaaget geaggageat
                                                                      540
egetaggtgt tgeegeeace gggaageggg getgeaggat gagtaagaga taettacaga
                                                                      600
aagcaacaaa aggaaaactg ctaataataa tatttattgt aaccttgtgg gggaaagttg
                                                                      660
tatccagtgc aaaccatcat aaagctcacc atgttaaaac gggaacttgt gaggtggtgg
                                                                      720
cactccacag atgctgtaat aagaacaaga tagaagaacg gtcacaaaca gtcaagtgct
                                                                      780
cetgetteee tgggcaggtg gcaggcacca cgcgagetge tecatcatgt gtggatgett
                                                                      840
caatagtgga acagaaatgg tggtgccata tgcagccatg, tctagaggga gaagaatgta
                                                                      900
aagttettee ggateggaaa ggatggaget gtteetetgg gaataaagte aaaacaacta
                                                                      960
gggtaaccca ttaacccagg agaaatcaag tgatcctcaa ggctgatgac attgaacatg
                                                                     1020
cgcataggaa acttaactca actcctgagg tgatctttga agatttttat taccactttg
                                                                     1080
aaaagagggc gttcantagt ctattttccc aaggggattt tengggcctc tttctttgaa
                                                                     1140
ttcaaggatt ttttaaaagt tcagacatga a
                                                                     1171
```

```
<210> 5940
<211> 1468
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (285)...(1390)
```

<223> similar to gi6010117 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5940
tecegggteg acgatttegt gegaaaagee gggaetggae etageggagt tgtgettgte
                                                                    60
gccgaagcgg ggtgggcttg ttcgttccgc gcagccgcag ccagaaccgg gtgacgctta
                                                                   120
180
ctccggagga ggaggcggag gccgaggacc aggaatcacc ttcaagccta tgtcgtgagg
                                                                   240
ctttggcaga aattaagaag gaaatatctc cattgttcat tggcatggaa aaatgttcag
                                                                   300
tgggaggatt agagttgact gaacagactc ctgctttatt agggaatatg gccatggcaa
                                                                   360
ctagtctcat ggacataggg gattcatttg gtcatccagc ttgtccttta gtcagtagat
                                                                   420
ctaggaactc accagtggaa gatgatgatg atgatgatga tgttgtgttt attgaatcta
                                                                   480
tacaacctcc ttcaatttct gctccagcaa tagctgatca aagaaacttc atatttgcat
                                                                   540
catcaaaaaa tgaaaagcct caaggaaatt attctgtaat tcctccttct tcaagagatt
                                                                   600
tggcatctca gaaaggaaat ataagtgaga caattgttat tgatgatgaa gaggacatag
                                                                   660
aaacaaatgg aggagcagag aaaaagtett eetgttttat egaatgggga etteetggaa
                                                                   720
ctaaaaacaa aaccaacgat ttggatttct ccacttccag tctttcaaga agtaaggtaa
                                                                   780
atgcaggaat gggtaatagt ggtatcacta cagaattgac tctgaaatac attattacta
                                                                   840
atgttacaac cttagaaaca ggtataagct ctgtgaatgc tgggcaagat gtgaacataa
                                                                   900
ttattacata taaaacatca ctatagaata ccaacttggg agatgtcgct aaaggacttc
                                                                   960
agtcaagtaa ttttggtgtt aatatacaaa cgtacacccc atctttaact ccacagacca
                                                                  1020
agactggagt aagacctttt aaccctggta gaatgaatgt ggcaggagac ttatttcaga
                                                                  1080
atggagaatt tgcaactcat catagtcctg aagatgcatc tacaaagaag gctaatgtca
                                                                  1140
ttottocagi agaatcaago aaatoottoo aagaatttta tagtacatot tgtttgtoto
                                                                  1200
cctgtgaaaa caactggaat cttaaaaaag gagtttttaa taagtcaaga tgtacaattt
                                                                  1260
gtagtaaatt agcagaggtc tggattttta tacctaagtt gttgtttagg ctaacagtga
                                                                  1320
taattttaac ttttaagtgc tattatgtac tctttcatct acataatgca cgtgttctgg
                                                                  1380
atgtataaca tgaagctgaa aggaagaata aggatatgtt agaactatct tatqqqatat
                                                                  1440
tttataaata aaattccatt tgcatagc
                                                                  1468
```

```
<210> 5941
<211> 4397
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4398)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (26)...(2703)
<223> similar to gi1871540 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5941

```
60
 cageteggte geoceaceg geoceatgge ageceegge geoceagetg, agtacggeta
                                                                       120
cateeggace gteetgggee ageagateet gggacaaetg gacageteea geetggeget
                                                                       180
 gccctccgag gccaagctga agctggcggg gagcagcggc cgcggcggcc agacagtcaa
 gagectgegg atccaggage aggtgeagea gaccetegee eggaagggee geageteegt
                                                                       240
                                                                       300
 gggcaacgga aatcttcacc gaaccagcag tgttcctgag tatgtctaca acctacactt
                                                                       360
 ggttgaaaat gattttgttg gaggccgttc ccctgttcct aaaacctatg acatgctaaa
 ggctggcaca attgccactt atgaaggtcg ctggggaaga ggaacagcac agtacagctc
                                                                       420
                                                                       480
 ccagaagtcc gtggaagaaa ggtccttgag gcatcctctg aggagactgg agatttctcc
                                                                       540
 tgacagcagc ccggagaggg ctcactacac gcacagcgat taccagtaca gccagagaag
                                                                       600
 ccaggetggg cacaccetge accaccaaga aagcaggegg geegecetee tagtgecace
                                                                       660
 gagatatget egtteegaga tegtgggggt eageegtget ggeaceaeaa geaggeageg
                                                                       720
 ccactttgac acataccaca gacagtacca gcatggctct gttagcgaca ccgtttttga
                                                                       780
 cagcatecet gecaaceegg ceetgeteac gtaceecagg ccagggacea geegeageat
                                                                       840
 gggcaacete ttggagaagg agaactacet gacggcaggg ctcactgtcg ggcaggtcag
                                                                       900
 geogetggtg cocctgcage cogtcactca gaacaggget tecaggteet cetggcatca
                                                                       960
 gageteette cacageacce geacgetgag ggaagetggg cecagtgteg cegtggatte
                                                                      1020
 cagegggagg agagegeact tgaetgtegg ecaggeggee egecaggggg aagtgggaat
 ctgcctcaac tgagagaaag cactttccac tgactcccca gctggggaat gcaagacatg
                                                                      1080
 gagatgactc tggagcgagc agtgagttat gctcgaggca gaccacatgc cgcccatccc
                                                                      1140
                                                                      1200
 aggatttctg ctgcagctac tttcattaca gcacgagtgc ttccagaaat ctgaagctcg
 gaagagggtt aaccagette gtgggcatee teaagettet geageteeta aaagtteagg
                                                                      1260
                                                                      1320 --
 aatgaaggac gtttcagccg agctgtgtgt ggggggcctt gaggaaactt aggtattttg
                                                                      1380
 aaggacaatt gaccaacaaa ttgggaggtg ggctgaacta aatgggggta cctcggctgc
                                                                      1440
 tccagggtgc tgaagcaaac cagagacttg ggagactaaa aaacaaataa cagaccatac
                                                                      1500
 agteaattta agaagtagga atggetggee gggegeggtg geteaegeet gtaateeeag
 cactttggga ggccaaggcg ggcggatcac gaggtcagga gttcgagacc agcctgacca
                                                                      1560
                                                                      1620
 acatggtttg ctgtggaatt tgtcatctaa tgacaaactc aagaatctca tgataacaga
 agcattgett acgetgacgg agaatateat cateccettt tetgggtgge etgaaggaga
                                                                      1680
 ctacccaaaa gcaaatggtt tgctcgattt tgacatattc tacaacgtca ctggatgcct
                                                                      1740
                                                                      1800
 aagaaacatg agttetgetg gegetgatgg gagaaaageg atgagaagat gtgaeggaet
 cattgactca ctggtccatt atgtcagagg aaccattgca gattaccagc cagatgacaa
                                                                      1860
 ggccacggag aattgtgtgt gcattettea taacetetee taccagetgg aggcagaget
                                                                      1920
 cccagagaaa tattcccaga atatctatat tcaaaaccgg aatatccaga ctgacaacaa
                                                                      1980
 caaaagtatt gggatgtttt ggcagtcgaa gcaggaaagt aaaagagcaa taccaggacg
                                                                      2040
                                                                      2100
 tgcccgatgc cggaggaaaa gagcaacccc aagggcgtgg agtggctgtg gcattccatt
                                                                      2160
 gttataagga tgtatctgtc cttgatcgcc aaaagtgtcc gcaactacac acaagaagca
 teettaggag etetgeagaa eeteaeggee ggaagtggae caatgeegae ateagtgget
                                                                      2220
 cagacagttg tccagaagga aagtggcctg cagcacaccc gaaagatgct gcatgttggt
                                                                      2280
 gacccaagtg tgaaaaagac agccatctcg ctgctgagga atctgtcccg gaatctttct
                                                                      2340
                                                                      2400
 ctgcagaatg aaattgccaa agaaactctc cctgatttgg tttccatcat tcctgacaca
 gtcccgagta ctgaccttct cattgaaact acagcctctg cctgttacac attgaacaac
                                                                      2460
                                                                      2520
 ataatccaaa acagttacca gaatgcacgc gaccttctaa acaccggggg catccagaaa
                                                                      2580
 attatggcca ttagtgcagg cgatgcctat gcctccaaca aagcaagtaa agctgcttcc
 gteettetgt attetetgtg ggeacacacg gaactgcate atgeetacaa gaaggeteag
                                                                      2640
 tttaagaaga cagattttgt caacagccgg actgccaaag cctaccactc ccttaaagac
                                                                      2700
 tgaggaaaat gacaaagtat tctcggctgc aaaaatcccc aaaggaaaac acctattttt
                                                                      2760
 ctactaccca gcccaagaaa cctcaaaagc atgccttgtt tctatccttc tctatttccg
                                                                      2820
 tggtcccctg aatccagaaa acaaatagaa cataatttta tgagtcttcc agaagacctt
                                                                      2880
                                                                      2940
 tgcaagtttg ccaccagtag ataccggcca caggctcgac aaatagtggt ctttgttatt
 agggettatg gtacatgget teetggaate aaaatgtgaa tteatgtgga agggacatta
                                                                      3000
 atccaataaa taaggaaaga agctgttgca ttactgggat tttaaaaagtt tgatttacat
                                                                      3060
 ttatatteet tttetggtte ceatgttttg teacteatgt geacattget tegecattgg
                                                                      3120
 gcctccagtg tattgttctg cagtgttgaa acagaatgga aatgacaaga aatatctgca
                                                                      3180
 gttatccagg gagaaagtat aatgggcaaa attattggtt tctttcttta ctttgtgctt
                                                                      3240
                                                                      3300
 gtttttatcc ccttggggnt gtttttctct ggatttttaa ataaacttac acttaagaaa
 tttagattac cagagtatgc ctgactgtaa gaaaaagaaa ttgagaggaa gtgatcatag
                                                                      3360
 caaattaaag aagtcttttc ctcccagaac ttaaagtaaa ataaaaaata aataaataaa
                                                                      3420
```

```
3480
taaaatcttt tccacagaga aaggcaactg tgatgataaa atttaacgtt cccccaaaca
ctgagtcaat gagatttttc tcaggagata ctttacctat aacaacgccg ttaaatccaa
                                                                     3540
atctcttcta aacgatggca ttctatgtaa tgcctttcct ggactttttt ggccactgcc
                                                                     3600
ctggactagt gaaagaatgg actctatctt tatctgcaag aggaactaag gccttctatc
                                                                     3660
                                                                     3720
agactgcctg gccagcctgg ggcactgaaa atacggctca tgttaatgag ttacattatc
                                                                     3780
agccagccca gccttgccca ccatttaaga aatatcacag agccactaga tctcatatga
tcttcttcaa gccattattt taactcaaga aaactctaga gaagaaaagt gaagaagtca
                                                                     3840
                                                                     3900
tgttgaagaa gatgtaagaa tgtgtcaaga ccatccagaa atgatatgag aaatactgat
attttaaatg gttgacatca tccagcgaaa tgaatctaca ttaaatgttg ttttaactgc
                                                                     3960
gctatggatt aaaaccattc atataggagt taggtcttta ccaactacta ttctgttatt
                                                                     4020
                                                                     4080
tttttttttta atctggacaa catttgtccc taggtaggtt agggcaaaaa aattctttca
actecttttg gegaagaaaa etgtaacaga aaataaattt tgaatgtgta ettaagtett
                                                                     4140
tattatattt gaaacaattt ttttttcaat tttaaaagct gaatgaagac aacttaggtt
                                                                     4200
                                                                     4260
gcctaaccta gttcaaaatg aaattattta gataccaatt tttaaaatac tggagagaat
ttatatgtct ttttccagag ttctgatgat aagcatttgg agtgcattta ttcctccaga
                                                                     4320
                                                                     4380
taataaatgt gtgttcagaa ctttttgtgt tttttaaggc attaataaag ccttcgataa
                                                                     4397
tattaaatac aaaaaaa
```

```
<210> 5942
<211> 1978
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (524)...(19)
<223> similar to gi5734705 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5942
attecegggt egaegattte gtäaggagat teggaggaea aagegagetg ttagggagta
                                                                       60
tttgggagtg gatttggggg ctgaatgcag atcttggtat tgggagggtt tgcatcacgt
                                                                      120
                                                                      180
ggcaggtgcg agcccagaga gaccggcgca gggatcctga tcttgaaaga ttgggagagg
gcaggaggcc agtctctatg ggggcggttc ccgtaggatc accaggtggg ttcgcgtgcc
                                                                      240
                                                                      300
cagattgact gcttgtgggt ggcatggcct caggtggaga ggcttgctgc ggactcaggc
                                                                      360
tggcgaatag ccctggcgaa caacgggcgg aggggaaggt gtctttcaag tcggtattta
ctctgaactg agggaagaaa agaacggagg ccgcgtcaga ccgagagctg ctctgcggcg
                                                                      420
gccagagagg gaatcccaag ctcttaatgg gcgggggtgg gggtagaaat gtctttttct
                                                                      480
attgtgtttg agaccggtaa tattggggag ggggagaaca agtattatcc cacgcagtac
                                                                      540
accocaatot cocagitoat itootaatoo itaaactoog gittoaaact coctogotit
                                                                      600
getetteagt tgeaggttee gatetttggg taeteeagga getgttetat ageeeetget
                                                                      660
tetggaceta tggattetee atetagegtt tetteetatt ceteetacte tetetetteg
                                                                      720
tetttteeca eeteeceagt gaacagtgae tttggettee eetetgatag tgagagggag
                                                                      780
gacaaggggg cccatgggcc caggccagac actgttgggc agaggggagg ttcacggccc
                                                                      840
agcccgggtc ctatccgctg caggcatcga tcgaaggttt ccggtaacca gcatacacca
                                                                      900
teteateega aacagegggg tteggettet eetatggeag gatetgggge gaaaagatea
                                                                      960
agagatggtg aactggagac cagtctaaac acccaaggtt gtaccacaga gggagacctg
                                                                     1020
ctgtttgccc agaagtgtaa agaactccaa ggatttatac ctcctctcac agacctactc
                                                                     1080
aatgggetga agatgggteg ttttgagaga ggattaagea gtttteagea gagtgtggea
                                                                     1140
atggacagga tccagcgtat tgtaggtgtt ttgcagaggc cacagatggg ggaacgttac
                                                                     1200
```

```
ctaggaacct tgctacaggt agaagggatg ttaaagactt ggtttccaca aatagctgcc
                                                                     1260
                                                                     1320
cagaagtcat cattgggtgg tggcaagcat cagctgacca agcattttcc aagccaccac
                                                                     1380
agtgattcag ctgcttcctc tcctgcatct cctatggaaa agatggacca gacacagcta
                                                                     1440
ggacatctag ctttaaaacc aaagcagcct tggcacctca cacaatggcc agctatgaac
ctcacctgga tccacaccac tccaatttgc aacccccctc tcagctcccc aggtactatc
                                                                     1500
tcctttagcc atggtccttt aggcactgga accggcattg gcgtcattct tttcctccag
                                                                     1560
catggagtgc aaccettcac ccactetgcc ccaaccaccc agtcccacct actacagcat
                                                                     1620
ctcctgttca ttccctggtg agcctatgaa actatctgga gagggtcctc gttgctacag
                                                                     1680
tttgcccagt aactetgcca ttcaggactg gagetatace ctateceete ecagtetace
                                                                     1740
caccttggcc agaaagatga ccataggaca ccgggagcag cagagaagcc atcctccagt
                                                                     1800
tgctgctgat gctcatcttc tcaaccttct agcccagggc atacagctgt ccactgtgac
                                                                     1860
                                                                     1920
ttctaatttg tgtaaatatt tatgtatata tgtattttta ctattaatgt gtgcatttgt
gttgagggaa gataaatcct ttctgattaa agaaattttt ttatacctaa aaaaaaaa
                                                                     1978
```

```
<210> 5943
<211> 2000
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2001)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (141)...(1587)
<223> similar to gi3510234 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5943
                                                                       60
aagaatgett geetetetgg ggettgagtt tgaaaggege caegagggge egggtageea
geocteaagt taagtgeact ageceaeggg tteeegaaaa ggtgggattg gatageteat
                                                                      120
                                                                      180
getecatete eeegeeacag catggeacet tgggeagtgg eegeteeteg gacaaaggee
                                                                      240
egteetggte cageegetea etgggtgeee gttgeeggaa etceategee teetgteeeg
aggageagee ecaegtggge aactaeegee tgetgaggae cattgggaag ggeaactttg
                                                                      300
ccaaagtcaa getggetegg cacateetea etggteggga ggttgecate aagattateg
                                                                      360
                                                                      420
acaaaaccca gctgaatccc agcagcctgc agaagctgtt ccgagaagtc cgcatcatga
                                                                      480
agggeetaaa eeaceecaae ategtgaage tetttgaggt gattgagaet gagaagaege
                                                                      540
tgtacctggt gatggagtac gcaagtgctg gagaagtgtt tgactacctc gtgtcgcatg
                                                                      600
geogratgaa ggagaaggaa getegageea agtteegaea gattgttteg getgtgeaet
attgtcacca gaaaaatatt gtacacaggg acctgaaggc tgagaacctc ttgctggatg
                                                                      660
                                                                      720
ccgaggccaa catcaagatt gctgactttg gcttcagcaa cgagttcacg ctgggatcga
                                                                      780
agetggacac gttetgeggg agecececat atgeegeeee ggagetgttt cagggeaaga
                                                                     840
agtacgacgg gccggaggtg gacatctgga gcctgggagt catcctgtac accctcgtca
                                                                      900
geggeteeet gecettegae gggeaeaace teaaggaget gegggagega gtacteagag
                                                                      960
ggaagtaccg ggtccctttc tacatgtcaa cagactgtga gagcatcctg cggagatttt
tggtgctgaa cccagctaaa cgctgtactc tcgagcaaat catgaaagac aaatggatca
                                                                     1020
acateggeta tgagggtgag gagttgaage catacacaga geeegaggag gaettegggg
                                                                     1080
acaccaagag aattgaggtg atggtgggta tgggctacac acgggaagaa atcaaagagt
                                                                     1140
```

```
ccttgaccag ccagaagtac aacgaagtga ccgcacccta cctcctgctg ggcaggaaaa
                                                                     1200
cttaggaggg tggggaccgg ggcgccccag ggctggccct ggcacgggtg cgggcgccca
                                                                     1260
acgacaccan caacggaaca agttccagca aaggcaccag ccacagcaaa gggcagcgga
                                                                     1320
                                                                     1380
gttectette cacctaccae egecagegea ggeatagega tttttgtgge ceateceetg
cacccctgca ccccaaacgc agcccgacga gcacggggga ggcggagctt aaggaggaac
                                                                     1440
                                                                     1500
ggettecagg ceggaaggeg agettedage acceegggga gtgggagteg agggetgeee
                                                                     1560
cccctccage cccatggtca gcagegeeca caaceecaae aaggeagaga teccagageg
geggaaggae ageaegagea ecceeaacaa ecteeeteet ageatgatga ecegeaggaa
                                                                     1620
                                                                     1680
cacctacgtt tgcacagaac gcccgggggc tgagcgcccg tcactgttgc caaatgggaa
                                                                     1740
agaaaacage teaggeacee caegggtgee ecetgeetee ecetecagte acageetgge
acceccatca ggggagegga geegeetgge aegeggatee accateegea geacetteea
                                                                     1800
                                                                     1860
tggtggccag gtccgggacc ggcgggcagg gggttggggg tggtttttca acaacacgc
                                                                     1920
cctccaaaga gcaccccgaa atgcaggggc accatcactg atgcccggac acagaacggt
cctcataaat tatgggggg ggcaagatct taaaaactgg gaaacatgcc ttgccgcccc
                                                                     1980
                                                                     2000
tccgaataag catagaagga
```

```
<210> 5944
<211> 1105
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (709)...(542)
<223> similar to gi2108256 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5944
                                                                       60
tttcgcgtgt gtttagttgt atgagtagat gggagcccta ggaagagagt agacaatata
                                                                      120
aactgggccc agcactgggt ccagggtaac cctaacattc aaaatggggg acagggagca
                                                                      180
ggcaaaagag gctgagaagg agcatccaga gaggtagggg ggaaactggg aggatggttg
ctcaggaaag aggggagctg actcagccac gcttctcctg gtcccctttg ccttctggtc
                                                                      240
taaggtatgg ttcagggtgg gtgttcagga gggagaaacc cttcggcctc ccccttccct
                                                                      300
atcoctcttc cotctctcc taccettttc tttctcccgg cttcttcctc ccctgcctct
                                                                      360
gtcctttcta cccttcctcc ctcgcagccc tctctactcc accccattcc ttctccttcc
                                                                      420
ctccagtatt ttggttcccc ccacctgtag gcccaggctg aagcccagag ggaacatgaa
                                                                      480
ggagccgtgc agctgctgga ggtagggcgc ctggaagtgg cccccagttc caccatcttg
                                                                      540
ggaggaaggc gggggtcctc cagatagagc tgaaatggac tatggcggtg gggagagggg
                                                                      600
ttgcaggagg ggcccttaaa tgctccagga cctgggggag/tcccctccac cactggccta
                                                                      660
tttctcaggg tgggcacggc tgggcagggg gctcccaagt ctggtggcag cagtctccca
                                                                      720
ttgctgccac ccccagaggc tgccttcacc ctgagatatc cttccattta ggaactgcta
                                                                      780
gtcagtccag ggagctgact ggatgatatc cacttaggcc cccttctccg cctccctctc
                                                                      840
tgggttagca acccacagcg ctcagggttc taacctgttc tctgcttcct ttcctgcaac
                                                                      900
agtotacett ggattecatg caggtagege etegttetee aettececae acetetecag
                                                                      960
getggetgag tigeatetee teeeteaggg eeeaggeagt eeeeetetet cateeageag
                                                                     1020
agggggtgtc actgggagca ggcatgagaa tccatagggg gtggagtttc cacaggacac
                                                                     1080
gtgcggctgt ccccttgtcc caggc
                                                                     1105
```

```
<210> 5945
<211> 6215
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (295)...(5000)
<223> similar to gi2224585 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5945
ecegeaatte eegggtegae gattatetgg geaceeggea gecacagege agegagageg
                                                                       60
gacggtcgcc atggttccct ccccagccag tcccaggcgc ccggtgcact atgcggggca
                                                                      120
                                                                      180
egtgegeece ceagetetaa tetgegeget gacaggagea tgatetgtge eeaggeeagg
getggeaaga atetgtaeea eaacaggttt ttaggeetgg eegecatgge gttteettet
                                                                      240
                                                                      300
agaaacteee agageetaeg eeggtgeaag gageegatee gatacageta caacceegae
cagttccaca acatggacct caggggcggc ccccacgatg gcgtcaccat tccccgctcc
                                                                      360
                                                                      420
accagegaca etgacetggt caceteggae ageegeteea egeteatggg caggagetee
                                                                      480
tactatteca tegggeacte teaggacetg gteatecact gggacataaa ggaggaagtg
gacgetgggg actggattgg catgtacete attgatgagg tettgteega aaactttetg
                                                                      540
                                                                      600
gactataaaa accgtggagt caatggttct catcggggcc agatcatctg gaagatcgat
gccagctcgt actttgtgga acctgaaact aagatctgct tcaaatacta ccatggagtg
                                                                      660
agtggggccc tgcgagcaac cacccccagt gtcacggtca aaaactcggc agctcctatt
                                                                      720
                                                                      780
tttaaaagca ttggtgctga tgagaccgtc caaggacaag gaagtcggag gctgatcagc
ttetetetet cagattteca agecatgggg ttgaagaaag ggatgttttt caacccagae
                                                                      840
                                                                      900
cettatetga agatttecat teageetggg aaacacagca tetteceege ceteceteae
                                                                      960
catggacagg agaggagate caagateata ggeaacaceg tgaaccccat etggeaggee
                                                                     1020
gagcaattca gttttgtgtc cttgcccact gacgtgctgg aaattgaggt gaaggacaag
                                                                     1080
tttgccaaga gccgccccat catcaagcgc ttcttgggaa agctgtcgat gcccgttcaa
                                                                     1140
agacteetgg agagaeaege cataggggat agggtggtea getacaeaet tggeegeagg
                                                                     1200
cttccaacag atcatgtgag tggacagctg caattccgat ttgagatcac ttcctccatc
cacccagatg atgaggagat ttccctgagt accgagcctg agtcagccca aattcaggac
                                                                     1260
agceceatga acaacetgat ggaaagegge agtggggaac eteggtetga ggeaceagag
                                                                     1320
                                                                     1380
tectetgaga getggaagee agageagetg ggtgagggea gtgteeeega tegteeaggg
aaccaaagca tagagettte cagaccaget gaggaagcag cagtcatcac ggaggcagga
                                                                     1440
gaccagggca tggtctctgt gggacctgaa ggggctgggg agctcctggc ccaggtgcaa
                                                                     1500
                                                                     1560
aaggacatcc agcctgcccc cagtgcagaa gagctggccg agcagctgga cctgggtgag
                                                                     1620
gaggcateag cactgetget ggaagaeggt gaageeecag eeageaecaa ggaggageee
                                                                     1680
ttggaggagg aagcaacgac ccagagccgg gctggaaggg aagaagagga gaaggagcag
                                                                     1740
gaggaggagg gagatgtgtc caccetggag cagggagagg gcaggetgca getgegggee
teggtgaaga gaaaaageag geeetgetee ttgeetgtgt eegagetgga gaeggtgate
                                                                     1800
gegteageet geggggaeee egagaeeeeg eggaeaeaet acateegeat ecaeaeeetg
                                                                     1860
                                                                     1920
etgeacagea tgeceteege eeagggegge agegeggeag aggaggagga eggegeggag
                                                                     1980
gaggagtcca ccctcaagga ctcctcggag aaggatgggc tcagcgaggt ggacacggtg
                                                                     2040
gccgctgacc cgtctgccct ggaagaggac agagaagagc ccgagggggc tactccaggc
acggcgcacc ctggccactc cgggggccac ttccccagcc tggccaatgg cgcggcccag
                                                                     2100
gatggcgaca cgcaccccag caccgggagc gagagcgact ccagccccag gcaaggcggg
                                                                     2160
                                                                     2220
gaccacagtt gegagggetg tgaegegtee tgetgeagee cetegtgeta cageteeteg
                                                                     2280
tgetacagea egteetgeta cágeageteg tgetacageg cetegtgeta cageecetee
tgctacaacg gcaacaggtt cgccagccac acgcgcttct cctccgtgga cagcgccaag
                                                                     2340
                                                                     2400
atctccgaga gcacggtctt ctcctcgcaa gacgacgagg aggaggagaa cagcgcgttc
```

2460 gaqtcqqtac ccgactccat gcagagccct gagctggacc cggagtccac gaacggggct 2520 gggccgtggc aagacgagct ggccgcccct agcgggcacg tggaaagaag cccggaaggt 2580 ctggaatccc ccgtggcagg tccaagcaat cggagagaag gtgaatgtcc tatactccat 2640 aattcccagc cagtaagcca gcttccttcc ctgaggcctg aacatcatca ctacccaaca 2700 ategatgage ctettecace aaactgggaa getegaattg acagecacgg gegggtettt 2760 tatgtggacc acgtgaaccg cacaaccacc tggcagcgtc cgacggcagc agccaccccg gatggcatgc ggagatcggg gtccatccag cagatggagc aactcaacag gcggtatcaa 2820 aacattcagc gaaccattgc aacagagagg tccgaagaag attctggcag ccaaagctgc 2880 gagcaagccc cagcaggagg aggcggaggt ggagggagtg actcagaagc cgaatcttcc 2940 cagtccagct tagatctaag gagagaggg tcactttctc cagtgaactc acaaaaaatc 3000 3060 accttgctgc tgcagtcccc agcggtcaag ttcatcacca accccgagtt cttcactgtg 3120 ctacatgcca attatagtgc ctaccgagtc ttcaccagta gcacctgctt aaagcacatg 3180 attetgaaag teegaeggga tgetegeaat tttgaaeget accageacaa eegggaettg gtgaatttca tcaacatgtt cgcagacact cggctggaac tgccccgggg ctgggagatc 3240 aaaacggacc agcagggaaa gtcttttttc gtggaccaca acagtcgagc taccactttc 3300 attgacccc gaatccctct tcagaacggt cgtcttccca atcatctaac tcaccgacag 3360 3420 cacctccaga ggctccgaag ttacagcgct ggagaggcct cagaagtttc tagaaacaga 3480 ggagectett tactggecag gecaggacac agettagtag etgetatteg aagecaacat caacatgagt cattgccact ggcatataat gacaagattg tggcatttct tcgccagcca 3540 3600 aacatttttg aaatgetgea agagegteag eeaagettag eaagaaacea cacaeteagg gagaaaatcc attacattcg gactgagggt aatcacgggc ttgagaagtt gtcctgtgat 3660 geggatetgg teattitget gagtetettt gaagaagaga ttatgteeta egteeceetg 3720 caggetgeet tecaccetgg gtatagette teteceeget gttcaccetg ttettcacet 3780 cagaactccc caggtttaca gagagccagt gcaagagccc cttcccccta ccgaagagac 3840 tttgaggcca agctccgcaa tttctacaga aaactggaag ccaaaggatt tggtcagggt 3900 ccggggaaaa ttaagctcat tattcgccgg gatcatttgt tggagggaac cttcaatcag 3960 gtgatggcct attcgcggaa agagctccag cgaaacaagc tctacgtcac ctttgttgga 4020 gaggagggcc tggactacag tggcccctcg cgggagttct tcttccttct gtctcaggag 4080 4140 ctcttcaacc cttactatgg actctttgag tactcggcaa atgatactta cacggtgcag 4200 atcagececa tgteegeatt tgtagaaaac catettgagt ggtteaggtt tageggtege atcetggggt etggetetga tecateagta cettettgae getttettea eggaggeeet 4260 tetacaagge acteetggag actgeeetgt ggattttgag tgacetggaa tatttggatg 4320 aggaatteca ecagagittg cagiggatga aggacaacaa catcacagac atettagace 4380 tcactttcac tgttaatgaa gaggtttttg gacaggtcac ggaaagggag ttgaagtctg 4440 gaggagccaa cacacaggtg acggagaaaa acaagaagga gtacatcgag cgcatggtga 4500 agtggcgggt ggagcgcggc gtggtacagc agaccgaggc gctggtgcgc ggcttctacg 4560 aggttgtaga ctcgaggetg gtgtccgtgt ttgatgccag ggagctggag ctggtgatag 4620 ctggcaccgc ggaaatcgac ctaaatgact ggcggaataa cactgagtac cggggaggtt 4680 accacgatgg gcatcttgtg atccgctggt tctgggctgc ggtggagcgc ttcaataatg 4740 agcagagget gagattactg cagtttgtca egggaacate cagegtgeee taegaagget 4800 tegeageece accepteggag ccaategege tteggegett cetegecatag aagaaategeg 4860 ggaaaattac ttctctcccc cccaggggaa cacacatgcc ttcaaccgga ctgggatctt 4920 ccaaccgtat cccctcgtac tcccatgttg tatgaaaaag ctgttaacag caagtagagg 4980 aaaccagcac ctttgggact tgagtgagga catggaacct cgcctgacat tttccctggc 5040 cagtgacate accettectg ggatgatece ettitecett tecettaate aacteteett 5100 tgattttggt attccatgat ttttattttc aaaccaaatc aggattgaca aaagctgtgc 5160 atgaagaact geettettet aagatetaae etteaggett eteteetetg titteaatga 5220 actgctagcc tgtatgcaat attaaaaaac agctgtctca aggtctgtgt atatctccac 5280 atacctccat tactaacaat gaaatatgaa tgcaagttaa gctacacttg accaaatggt 5340 aataaatgtt tacttccatt tctatcattg aagggaaaat gtgagcatta agcactccag 5400 gctttcatat gcccatgtct tctgagcaga gccaccattt tttataattt ctaataacca 5460 actocagaac taggagotga toaactottt gttttcctct coatotactt ttccctgtgc 5520 ataatateea teeaaaggae aacagtggea aagetgaaat tittataeat teaacteatg 5580 attcacatgt ggcatcagtc ccatcagccg gaactagcct agacatacgg tgcaaatatg 5640 acacttetaa egattaacaa cagcaagaaa acacetgetg etgatgeaat geaatgeate 5700 ccaatggttg tggggattgt gggctcaact caagagaagt ttaggagggg gagcatccct 5760 agtgaatact cacaccacaa gaaggacaaa cttgtgcaca tgtccaagaa agaaagcttc 5820

```
ttgattgagg tagcataaag gatgaggctt cagccccat tgtcttatgt agaatgtggc 5880 aatgccaact ggagaaaggg aagaaggaca tattaccttg gtttgaatcc ctgagttctg 5940 tactgttctg ttttgttag tctagccaca gttcttcaca aaggaaaaaa aaatgtgtag 6000 atgataccat gacttttgtt aaagccatga cttttgtttg cttggcagac aaaccctttt tttaaaactt tgatatttt ttttcacgtt ttttttcct tttcctttct taatcatgga 6120 gttcaagttc ctttgcattc gattgtccat cgggaccaca ctaggaagct gcagagagta 6180 atggtgcttg ttagggatca agggcaacat ctatt
```

```
<210> 5946
<211> 1525
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1401)...(572)
<223> similar to gi3880422 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5946 ttetttteat etgetttagg aaageteagt aagetttett tttttteeag aggeagggte 60 tggctgtatc acccaggctg gagtgtatgg cacaaccatt gctcactgcg gcctcaacct 120 180 cctgggctca agtgatcctc ccgcctcagg ctcccaaagt gctgggatag caggcatgag ctgtcgcacc tagccagcaa tatacaacct tgaagggtta atagtgacat ggacagaggc 240 300 aaggtgccca gttacacatt ttcagacatc atcttgttta ttacaaaact taaaacacct 360 tccaggcaag atccaaagca attttatcct aacattgttc accttcatct gtagagtcaa 420 atgtatetge cagettgtgt tgacaagggg gaatgettee catttggtea aggttgaggg 480 acagtaaagg aatcttgtat tctaatgagt acagcatcct ttcattgtcc aagccatcca 540 cettaggget ttgaggttea agteeaggte tggagaagag aaagttteat acceaacett 600 gtggtctttc cttcggtagt acattcgtgt cagcacagtc attagaaaag tctccagtat gaggaggtgg caattcatca cttgagacct ggttttagag gaatagggag gcgaacaagc 660 aatotgooca cogttggooa agactgagaa gatggagggo tgtagggoag tcaggatgag 720 780 gagaacctgg aacagagcaa atttggctcc catgttctgc tcacccaggt gtagcctggc ttgacgggaa atgatgccca gggtccagag agccagcagt gtggacacgc cgaggaaagt 840 900 gttgatecat agagetgtge tecceteaga aatgtetget gggteataga tgeegteggg 960 gatgagaaac aggcccacca gggtcagcgt tatcttcaag aaggcgtatt ggaaagggcc 1020 caacatcagc agctgaagct tetteetggt gagcagcage egtggacage aggggcagca 1080 gcagcagcag gggcctgtgt ggaccatcat cggggtgtcc ctcagcgtcc tcagcactgc ctccttcccc ccaaagcctt ccaccatgac cagcatcagc aggtaaaagc acacggcata 1140 aaacgaggtg atggtcattt ccaccagcac cagggaacga gggatccaga gaccaaagca. 1200 gcacagcaca gacaccaccg tgggtgccga gctcttccag agcagagtcc gcctcttgat 1260 1320 ggggcaaagg gtgttcttgt acaggtagac ggcatcctcc aggaagatgg caatggagcc cagegecage aaggteagga tgetagtgag ggeaagttee acagggeeca gggeteteag 1380 gagttgggct gctgtgggag gctgagagaa gcaggcggag gggatgccgt aattggtctt 1440 cagcacetee agaagatetg etgtgtacet ggggteaage tttatetggg teetgeeegg 1500 ctccatcgcc gcgaattccg ccacg 1525

```
<210> 5947
<211> 2234
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (358)...(596)

<223> similar to gil710216 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5947
                                                                       60
cagatggact gacccacagg catccacatg tggtgctgaa gaagccatga ggaaaggggg
aggtgggaag ggcctcgtcc agggtgtctg gctgcacagg agacatagca gctcccactg
                                                                      120
gcaccetgca tacaagggaa aggeetegaa atgegeteae caaageetea gagttttatt
                                                                      180
                                                                      240
atcaggaget cacattcagg agcaggtetg ettgtcaaga atccaagcac geetgtgtte
tgtggccaca ggagaggagg ggccgctttt aaatacaagc ctactcctgt cgttggacca
                                                                      300
gaacaaagac ctactggcca gaagcacatg agaggaggag tttcactctt gtcgcccagg
                                                                      360
ctggagtgca gtggcacgat ctcggctcac tgcaacctcc gcctcccaag ttcaagcaat
                                                                      420
tetectgece cageeteetg attagetggg attacaggeg tgtgecacea tgeccageta
                                                                      480
atttttgtgt ttttagtaga gacggggttt caccatgttg gtcaggctgg tcttgaactc
                                                                      540
                                                                      600
ctgacgtggt gatccacctg cctcggcctc ccaaagtgct gggattacag gcgtgagcca
ccacgcctgg ccgaaaaacc cactctcata acagaagtgc agactcattg ctagattcag
                                                                      660
                                                                      720
tgcccttgag tgtgccagag gtcctctgtg tttgagacaa tcctgtgtgt gccaggaggc
                                                                      780
teegtgtgea ceaggggete teagaateee gettaceeag etggagaeea tgeetetgge
                                                                      840
agececatet cagecagece tgetetetee etetteeete caggtgagge aaaetteata
ggaatetgta cetgaatgtg ageteetgat aataaaaete tgaggetttg gtgagegeat
                                                                      900
ttegaggeet ttecettgta tgeagggtge cagtgggage tgetatgtet eetgtgeage
                                                                      960
cagacaccet ggacgaggee etteccacct ecceetttee teaeggette tteagcacca
                                                                     1020
catgtggatg cctgtgggtc agtccatctg tccatgggca ggggccgctg tgagagaccc
                                                                     1080
catgcgcgtg ggatgtggta gatgctgatt atggggccag ccacccatac aggtctatca
                                                                     1140
                                                                     1200
ggtcgcaatg gaggccccac tggagcggga ggcaggctgg cctggacttc tgttggatga
tgggggccag gggatggtag gaggggcagg agagcaggtc tgcatctgtc tcagccccag
                                                                     1260
gageteetgg tttggggeea getetaagga getteateee tgageetgge egagtataag
                                                                     1320
ggggtcccgg atatccaatg ctgagaccta gacttttcta agcctctgca cccaacccct
                                                                     1380
aacttggcct tttcagaccc atgagagtgc agggtgggtg tggacctgcg ccagggcttc
                                                                     1440
ccagcctgat tgtgacatga tgtgagtcca cctagggagg agcaggggcc tccccgtctc
                                                                     1500
ttccccttct tgcccagacc actttgctgg gctcagagcc ttccatggct cactttgaac
                                                                     1560
tcagaagagt ttcccagctg cgacccaggc tgcaccccca ggcctgagga gaaactgagg
                                                                     1620.
ccccacatcc catacgtgtc ctctgagtca ggacaacagg ctcccggctg ggggcactgc
                                                                     1680
cettgetgee aacacattca cetgececag tggetaccat gteetgtgee ggtgaccagt
                                                                     1740
gccagtcccc aacctggatg gtgccctgcc ctcatgaaga gccccccgga tgttcacctc
                                                                     1800
tgcccagaga cccggcctgc ccaggaagag cagtctctgc tcttgtgtgg gtccctctgc
                                                                     1860
ccccaccctg cccagggctc cccagcagcc tgaggcccct aaggaagaac agccctcaat
                                                                     1920
ggtgattcta ttggtgttat gagttgtgtc cccaaagaga tatatcagtg tcctgaccca
                                                                     1980
cagtacctca gaatgtgact gcatttggag atagggttct tccaggggta accaaggtag
                                                                     2040
aatgaggtcg ttagtgtggg ccctaatcca atatgacggc tatccttata aaaagaggaa
                                                                     2100
catttaggct ggatacagtg gctcatgcct ataatcccag caccttggga ggctgaggca
                                                                     2160
ggaggacttg cttgagctca ggagttcaag accagcctgg ggcaacatgt cgaaacgctg
                                                                     2220
tgtctaccaa aaaa
                                                                     2234
```

```
<210> 5948
<211> 1596
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (869)...(581)
<223> similar to gi5911959 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5948
                                                                       60
ggtggaattc ctcagcaccg cctctcaaca gggatgactc agcagggatg actcagcacc
                                                                      120
gececteaac aggeatgact etgeagagat gaeteageac tgteeettag cagggatgac
                                                                      180
acaqcaaqqa tgactcagca ctgcccctca gcaaggatga ctcagcactg ccgctcaaca
                                                                      240
gggatgactc agggatggct tagtactgcc cctcaacagg gatgactcag cagggatgac
teageacege cecteaacag geatgaetet geagagatga ettagtaetg ceceteagea
                                                                      300
                                                                      360
gggatgactc agtactgccc ctcagcaggg atgactcagc actgcccctc aacagggatg
                                                                      420
actcagcagg gatgactcag cactgtccct tagcagtgat gacacagcaa ggatgactca
gcactgcccc tcagcaagga tgactcagca ctgccgctca acagacatga ctcagggatg
                                                                      480
                                                                      540
gettagtact geceteage agggatgact cageacegee ceteaacagg gatgactcag
cactgoccot caacagggat gactcagcag ggatgactca gcactgtccc ttagcagcga
                                                                      600
tgacacagca aggatgactc agcactgccc ctcaccaagg atgactcagc actgccgctc
                                                                      660
                                                                      720
aacagacatg actcagggat ggcttagtac tgcccctcag cagggatgac tcagcaggga
tgactcagca ccaccectca acagggatga ctcagcaggg atgactcage actgececte
                                                                      780
                                                                      840
aacagggatg actgcaggga tgactcagca ctgcccctca gcagggatga ctcagcactg
                                                                      900
cccctcagca gggatgactc agcagggatg actcagcacc gcccctcaac aggcatgact
                                                                      960
ctgcagagat gactcagcac tgcccctcag cagggatggc tcagcaggga tgactcagca
ttgcccctca acagggatga ctcagcagac tcagcaggga tgactcagca ctgcccctca
                                                                     1020
acagacatga etcageaggg atgaetcage accaeeeete ageaaggatg acteageagg
                                                                     1080
gatgattcag cagagataac tcggggatga ctctgattgt ccttcagcag ggatgagtct
                                                                     1140
gttttgctcc gatggaagca tctgtagtgt ccatcagcag gtgaatggcc aaagtggtat
                                                                     1200
atactgtagt cacattcagc tataaaaagg aataaagtat cgatgcatgc cacaacatgg
                                                                     1260
                                                                     1320
gtgaacctag aaaatactga tctaaatgca agaagccagg cacaaaaggc cacatagtat
                                                                     1380
atqttcccat ttatqtgaaa tqtgcagaat aataataaaa atgtatagaa tagcaaatct
                                                                     1440
gtagggacag acatgaggtg agtggttgcc agaagtggaa atgggagtta actataaatt
                                                                     1500
gcacagggta ccttacagag atgatggaaa tgtcctaaaa ctagattatg gcaatagttg
cactacgtga tcagtttatt aaaaatcgtt gatgtgtgtg tgtaaaatgg gtggatttta
                                                                     1560
tggtttataa attatacctt aataaaggtt aacaaa
                                                                     1596
```

```
<210> 5949
<211> 599
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (77)...(438)
```

<223> similar to gi995526 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5949
actaeatgtg ccagtaccag aeattccagg aeaaacaaga aatttgtttt tgcaattagc
                                                                       60
caagcatgta gcccagtctc tcaatgtcac ttcatgttat gtatgtggag aagctgtaat
                                                                      120
aagagatcaa tggccatggg aagcctgaga attagtacct acagtacctg atgaattcct
                                                                      180
ggctcaaaag aatcaccctg ataatttctg atcctaaaag cctcaattat taaacaatat
                                                                      240
tgcatagcta gagaaggaaa agaattcact caccgcgtag gatgacttag ttgtcggaga
                                                                      300
cagaaactgt ataatggtac cacaaaaaca atcacttggt ggagttcaaa tcacacagag
                                                                      360
                                                                      420
agaaaattta gtaaattete aaagttgeaa aetgggaeee aeetgggagt eeeaeeggge
ttgggaacag cccccactgg gatttttact gggatatgtt agggcttgga gcttattgac
                                                                      480
aggtttactg gaccattggg caggtagttg ttgtttattg ggcactattt aaaccatctt
                                                                      540
                                                                      599
tettecetae tgeeccataa aaacagggea aacteettgg ggttteeect gttettaeg
```

```
<210> 5950
<211> 3318
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (114)...(1736)
<223> similar to gi755750 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5950 60 gagettgege cagtetette geggegteca ceaettagae geaagttget gaageeggee 120 ggggagaagg tgttgttgcc ggagctgaga ccgggcggcc acagtccgca gggatgaacc tegagttget ggagteettt gggeagaact ateeagagga agetgatgga aetttggatt 180 gtatcagcat ggctttgact tgcaccttta acaggtgggg cacactgctt gcagttggct 240 gtaatgatgg ccgaattgtc atctggggat ttctttgaca agaggcattg cttaaaataa 300 atttagtgca cacatccatc cagtgtgttc tttatgctgg agccgagatg gtcataaact 360 420 cgtgagtgct tccactgata acatagtgtc acagtgggat gttctttcag gcgactgtga ccagaggttt cgattccctt cacccatctt aaaagtccaa tatcatccac gagatcagaa 480 caaggttete gtgtgteeca tgaaatetge teetgteatg ttgaecettt cagatteeaa 540 acatgttgtt ctgccggtgg acgatgactc cgatttgaac gttgtggcat cttttgatag 600 gcgaggggaa tatatttata cgggaaacgc aaaaggcaag attttggtcc taaaaacaga 660 ttctcaggat cttgttgctt ccttcagagt gacaactgga acaagcaata ccacagccat 720 taagtcaatt gagtttgccc ggaaggggag ttgcttttta attaacacgg cagatcgaat 780 aatcagagtt tatgatggca gagaaatctt aacatgtgga agagatggag agcctgaacc 840 tatgcagaaa ttgcaggatt tggtgaatag gaccccatgg aagaaatgtt gtttctctgg 900 ggatggggaa tacatcgtgg caggttctgc ccggcagcat gccctgtaca tctgggagaa 960 gagcattggc aacctggtga agattctcca tgggacgaga ggagaactcc tcttggatgt 1020 agettggeat cetgttegae ceateatage atceatttee agtggagtgg tatetatetg 1080 ggcacagaat caagtagaaa actggagtgc atttgcacca gacttcaaag aattggatga 1140 aaatgtagaa tacgaagaaa gggaatcaga gtttgatatt gaagatgaag ataagagtga 1200

```
gcctgagcag acaggggctg atgctgcaga agatgaggaa gtggatgtca ccagcgtgga
                                                                   1260
                                                                   1320
ccctattgct gccttctgta gcagtgatga agagctggaa gattcaaagg ctctattgta
tttacccatt gcccctgagg tagaagaccc agaagaaaat ccttacggcc ccccaccgga
                                                                   1380
tgcagtccaa acctccttga tggatgaagg ggctagttca gagaagaaga ggcagtcctc
                                                                   1440
agcagatggg toccagocac ctaagaagaa acccaaaaca accaatatag aacttcaagg
                                                                   1500
agtaccaaat gatgaagtcc atccactact gggtgtgaag ggggatggca aatccaagaa
                                                                   1560
                                                                   1620
gaagcaagca ggccggccta aaggatcaaa aggtaaagag aaagattctc catttaaacc
                                                                   1680
gaaactctac aaaggggaca gaggtttacc tctggaagga tcagcgaagg gtaaagtgca
                                                                   1740
ggcggaactc agccagccct tgacagcagg aggagcaatc tcagaactgt tatgaagacc
                                                                   1800
ttcqaagttc ttcattcttt ctcactttgc catcatgtgg cctctggaca ctgtggtcag
tcatttgaaa attgacttta atttaaaaca aaggcctgtg cctcccaccc aggaggtggg
                                                                   1860
agggtgaatt ttatgtttaa atgaagaagt gaattatgga agaagagtat acgaccttcc
                                                                   1920
cttccctttc aagcataagt ccaaatagac tctcaggaat gaagatttgt gaagacatca
                                                                   1980
gataggaatt ttgactcatt taaactttga tgcttagtta tgttgctgga gaaaagatac
                                                                   2040
                                                                   2100
ttatgttttg ctcatctaac ttcattgtac ccagegtcat tttgacatgt catttcctat
                                                                   2160
ctcccatttg ccttcggtcc tcaatgcatg tctttgagtg acttcttatc tgaaattttg
ctactggtat cctaggaaag cttttgttgg atactctcat tttaaacttc tcctcccc
                                                                   2220
                                                                   2280
agatacetee tatattteea tattgtgtge aaaggatggg caaaaaagaa agtgettgaa
                                                                   2340
agatttcaaa ttttcagaaa gggaacaacg aaggccctct cttcctctca taccacgttt
tgctcaagaa gctgggctgt aacaattcag ggttttccct tgttttcctc tcattgcatg
                                                                   2400
                                                                   2460
tttccctcca atattggttc attgtcatca atcatggttt ttgaagatag ctagttttat
ccatctccag caaagaatca tcaatagttt atattgcttt acctgtgctg gcttccagag
                                                                   2520
                                                                   2580
atggaaacaa acccaggtgt ctctcaacaa gctacttttt tactggggtg ggggaatcta
                                                                   2640
2700
gatcaaggtg aattittigt atcactgcct giggaaatci atcctcatca gicatigcat
                                                                   2760
ttttccctgc ctatacctgt geteettitt ettactgtgt tttcagtcac ttcctttctg
tgaaaggttg cttagctttt tttttgacat ttgttgttct ttatataaaa ataacagatt
                                                                   2820
                                                                   2880
ggatagatgt gtacatttgg tgtttgaaat tetetgaaaa teeeattagg aaaccaggtg
                                                                   2940
tgaaaagggc tcagtagctt ctctgagtgg cgtttttagc tgactggaag tgcttaatct
ggatcgtctt ttttttttt ttttttttc aatattttaa aaggagaatt taaatactgt
                                                                   3000
                                                                   3060
gcttactgtg aaatatatca gttggtgagc cgggcgtggt gggtcacgcc tgtaatccca
gcactttggg aggccaaggc gggttgatca cccgaggtca ggagttcaag accagcctgg
                                                                   3120
                                                                   3180
ccaacatggt gaaagcctgt atctattaaa agacaaaaat tagctgggcg tggtggtaca
                                                                   3240
tgcctgtaat cccagctaca ctggaggctg agtcaggaga atcacttgaa cgtgggaggc
agaggttgca gtgagtggag atcgcaccac tgccctccag cctaggtgac agaatgagac
                                                                   3300
                                                                   3318
tctatctcaa aaaaaaaa
```

```
<210> 5951
<211> 861
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (452)...(11)
<223> similar to gi332565 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5951
gtggttggaat tcgcagcgcg tgtgcctgga gcgcgtgcag tgctcgacgg cctcgggcgc

```
tgaggtgaag ggctccggcc gggtgctcag ctgccctggg cccagggccg tgaccgtgcg
                                                                      120
ctacacettt accgagtggc geteetteet ggacgtgecg getgagetge agecegagee
                                                                      180
gctggagcca cagcagccag aggcaccgtc tggggcctcc gagccagggt ccggggatgc
                                                                      240
caagaaagag ccaggcgccg agtgcttcca cttctcgctg tgcctgccc cgggcctgca
                                                                      300
gcctgaggac gaagaggacg ccgacgagcg cggcgtcgcg gtccacttcg ctgtctgcta
                                                                      360
ccgctgcgcg cagggcgagt actgggacaa caacgcgggc gccaactaca cgctgcgcta
                                                                      420
cgcgcgccct gcggacgcgc tctgagcctg gagagtttcg aagagccgtg gggcggggtt
                                                                      480
                                                                      540
gattagcacg tggagctcgg gctgccgcct caaggaactt gctgggacgc tttgctgagc
                                                                      600
gtggcgagtc tggcgtgagg ggcgcgtgga gggaaaggag ggagactttg aaccgtcgac
                                                                      660
tegeacecee geagacaagt gagegagett agagageeeg ggeaatgete egaaageete
tgacctcagt cttctcgtcc gtttgacctt cctacaaggc ctctagaatt cccagcctgc
                                                                      720
gtcagagtag gaagaaactt ccaaggcccg gagcagctgc ctccaagaaa aaggctccca
                                                                      780
actocogggo atggttotaa ggoottggga ttggttttta actotaaata toatattgta
                                                                      840
                                                                      861
gcccttgcag tttgctggag a
```

```
<210> 5952
<211> 1345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1210)...(845)
<223> similar to gi595915 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5952
                                                                      60
ttttttttt ttcacaatga ttgtacttta ttgatgtgtt acaggaggta aggactttct
                                                                      120
gcttaaaata tttaaaattt acatgtgcac acaaacaaac acaggttccc ccacccatgg
                                                                      180
ggaagggcga gatgactctg aataaaggat ggaggagaag aagagggtgt agacggaggg
                                                                      240
cccttgaccc ctacaggggc agcaggataa ggaatagagt ggggcagaag gtgggttatt
                                                                      300
aagaagcate ttgettaetg acatgaagee acgtgeecag egagageaca gatgaggeet
                                                                      360
cattggcgta gaggaggccc ttggagggca ggcacacggt gcccaactag ccagccaagg
                                                                      420
ccaacgtece aggggtaggg cggaagtggg gtggcgtgca cagggcacce agcccaggcc -
tctgctgccc ccacctcct ccccaccctt tgagagaaaa gacggtttgg gcctcagcca
                                                                      480
                                                                      540
eggacegacg cegitacegg cagegtetee tgaaactaca gagatacaat gtgtatcaac
                                                                      600
agggtgateg ettetgacee aetgaggeag acagetagag gtgetgeatg ggeeagaace
aatcctacag tatctttggt ttgtgggttt ccttcccgac ttgaatcctc cctctgtcca
                                                                      660
gcctctgggg tgggcctcag ggctgggaat gggctgctca atggcccaaa gcccagcctg
                                                                      720
acggecettg gaggetgggg gtgetgeeet tgecagecac aggeagetta etcaetgggg
                                                                      780
tgctgggact tgtaggagag gatctcggca gccagctgct gggggtccag gagctgtggg
                                                                      840
aagegeeeca teacageete caccaggtge gggggaaaca caccacacag ettagtatac
                                                                      900
acgctggcct gctccttggc caggctgcct gccctgcccc acgggctcct gccagcccct
                                                                      960
                                                                     1020
gggctctgca ctgggggctc ctgaaggact gatgtgggtg ggggcagtgg gtatggttca
                                                                     1080
gaccagtact ctcgaggtgg aaaggcaggg ggcgcgggtg ggtagtcggc agggacactg
                                                                     1140
aagtggccag cacccatggc ccggccaaag gcagagaagg ctgcggtggc tgggagctca
                                                                     1200
gatecatagg gaetgtagee egtgtaaggg geteggggtg ggeeeggete accagggeet
                                                                     1260
cctcctcgaa cccccaaag ttccgacatc tggctctcca gggagccaat gcccgagtcc
                                                                     1320
aggcaatcet gggagacgta cgggagtgag tecagegtet gtgggageca gtetgtggge
                                                                     1345
ccgaattcca ccgcactgta ctagg
```

```
<210> 5953
<211> 1346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1306)...(399)
<223> similar to gi535586 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5953
ctttacatga ccttgctgtc ctcccttccc ttctcccacc ttccagcctc tggctacaac
                                                                       60
acgcgtgcag tttaaggcaa aagctcagca aacccagccc ccaggattga ggagctcccg
                                                                      120
ccccccatg cagetggact ccacetcage agaggacace agtecagete teageagtgg
                                                                      180
cagetetaag eccagggtgt ceatecegat ggteegeata etggeeecag teetggtget
                                                                      240
getgageett etgteageeg eaggeetgat egeettetge ageeacetge teetgtggag
                                                                      300
aaaggaaget caacaggeca eggagacaca gaggaacgag aagttetgee tetcaegett
                                                                      360
gactgcggag gaaaaggaag ccccttccca ggcccctgag ggggacgtga tctcgatgcc
                                                                      420
tecectecae acatetgagg aggagetggg ettetegaag titgteteag egtagggeag
                                                                      480
gaggccctcc tggccaggcc agcagtgaag cagtatggct ggctggatca gcaccgattc
                                                                      540
ccgaaagett tecaecteag ecteagagte cagetgeeeg gaeteeaggg eteteeceae
                                                                      600
cctccccagg ctctcctctt gcatgttcca gcctgaccta gaagcgtttg tcagccctgg
                                                                      660
ageceagage ggtggeettg etetteegge tggagaetgg gacatecetg ataggtteae
                                                                      720
atccctgggc agagtaccag gctgctgacc ctcagcaggg ccagacaagg ctcagtggat
                                                                      780
ctggtctgag tttcaatctg ccaggaactc ctgggcctca tgcccagtgt cggaccctgc
                                                                      840
cttcctccca ctccagaccc caccttgtct tccctccctg gcgtcctcag acttagtccc
                                                                      900
                                                                     . 960
acggtctcct gcatcagctg gtgatgaaga ggagcatgct ggggtgagac tgggattctg
                                                                     1020
gettetett gaaccacetg cateccagee etteaggaag eetgtgaaaa aegtgattee
tgggccccac caagacccac caaaaccatc tctggggctt ggtgcaggac tctgaatttc
                                                                     1080
taacaatgcc cagtgactgt cgcacttgag tttgagggcc agtgggcctg atgaacgctc
                                                                     1140
                                                                     1200
agacccctcc agcttagagt ctgcatttgg gctgtgacgt ctcccacctg ccccaataag
atotgototg totgogacac caagatocag otggggacto cootgaggeo tgcctaagto
                                                                     1260
                                                                     1320
caggccttgg tcaggtcagg tgcacattgc agggataagc ccaggaccgg cagagagtgg
                                                                     1346
ttgcctttcc atttgccctc cctggc
```

```
<210> 5954

<211> 1632

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1633)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (1452)...(496)
<223> similar to gi3450828 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5954
                                                                      60
ttttttttt tttttttc acaaaagcca tctctcttta gtgttttcat tcctgcccgt
                                                                      120
tcaaaccagt ttgtgcaagc tgaggatgag tgggtttttg gaaccgggag gcagagcatc
tgggggacaa gacccctcct ggaaaatggt cctnatgcaa cactgctgaa ggctggttag
                                                                      180
                                                                      240
acttgagaag caattgaaca ataaactcta cagaacctgg aaaatgttca aaagtgtcaa
ggtggcttct ggctgttttc ctgcctccct gtggggggtc agttataccc atcagtcctg
                                                                      300
tgcaaaggtc ctggggactg gcccaggggc agccggattc ttccgctggg gacaggaagc
                                                                      360
                                                                      420
ttgtccttgc ttaaccccaa gcagaagcca tgccaaatgg aacaaggttg ctcgggttgt
                                                                      480
gtgccccaag gtgctgtggc cccccaaaac tccgtggctc ctcaaagcaa tgtctttcat
cctqtctcta tgttatgtcc gccccttttg aaaagtgttc attcaaggtt gtaggtttcc
                                                                      540
ttgagaattt tgtggatctc ctcgagtgca agcctgtgga agtatgcttt tcaagataac
                                                                      600
gagggcatgc attgtccatg ggaggaggag gagggcctgg ttgagctgca cagcttccac
                                                                      660
                                                                      720
ttqttcttcc gggccaccgt ctccggcttt cagtggggga aagaggttgg gaaaacctga
actctcaatg cccctggaac atctcggtgc ttgttgtgga aagggcaagc actgtggtgg
                                                                      780
cgcttgactc ccggacaagt cccagcaagc ccccagggtc aaggctctcc atgaaggcga
                                                                      840
                                                                      900
aagctgacgc tttggaatgt gcaaattaat cgaatggcac cggggggaatg gcaagaacaa
tgcccagcaa cggaagttga aggcaacacg aatgtggcca ttctgctgtt tccagcataa
                                                                      960
                                                                     1020
cttqccagag aagggccct ggtggttcca aaactggccc cagggtgttg atgtgttggg
acttgaggag ggcatcatca tcactgtcca ttaggccctt cccatggacc acggcggcat
                                                                     1080
                                                                     1140
tqttcaccaq gatggtgatg tcacccacct tctcccggac ggccttggcc gtctggtaca.
cotoctocog gttgcccaca tcacagatga agtaatggca ctcagtgccc atctgccgga
                                                                     1200
tetecteegt egteteette aggeatttet eagteeggee ecagagaaca atetttetgg
                                                                     1260
egeogegete egegaacteg egggegaget gaegeeegat geeteteeeg eegeeggtga
                                                                     1320
tgaggacgtt ctcccgcgac aggtcccgca gcttggcggg cagcaccagt ccgacggctg
                                                                     1380
ctttcaccac cagatagatc atctgtagag ggaacatcac cagcgcgccc agccgtttcc
                                                                     1440
acaccatect ecgegeegeg gageegggea gggggegaaa eteceeggge egageaatae
                                                                     1500
aggaattaaa aaacaccccg aacaataaat agtaaaccga ataaggagga gagaggcgtc
ccacctggcc actcttgaaa tcacctcttc ccaaatgcaa agcaccgggt gagaaaaaga
                                                                     1620
                                                                     1632
agaaaaaaa aa
```

```
<210> 5955
<211> 1771
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (905)...(307)
<223> similar to gi2047353 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5955
                                                                       60
tcactattcc atgtggcgga attcgcgcac agtaagggag aatgtgggga ctcagagcag
gagcctttgg agtcagagaa gttttccaga aggaacatct aagcagagcc cggctaggca
                                                                      120
aagtgaactg ccatggcgag ggcctggaga cttccagaag cgtgataact gctcttaatt
                                                                      180
                                                                      240
gttcaaccct caccaggage taagecetgt gaggtgggtg ctattagggt ecceatteta
cagatgagga aactgaagct caggaagtct cctggctcgc cagcaaggca gctggaggtt
                                                                      300
getgaeetee gagggaggee eeageeaagg tgggtgetga gtgggegeee eeteetetee
                                                                      360
                                                                      420
cctctcaggc ccagtaccgc cgaggcctgg agctgtccaa gcaggccgct cagctgggag
                                                                      480
ctacagccag agggctggg gaggcagaac gtgcagagtt cccagagctg gcagcctttg
cctctaccca gcgggccttc caggctgagc tgacccactt ttacatggcg gccgagcggc
                                                                      540
                                                                      600
aacgcacgga cctcgagacg ctgctccacc tgcaccgctt ctgcaagagg atgacctggt
                                                                      660
tocacatgga etgteaggae etgatggeee ageteagget ggacaagace teaagggtea
                                                                      720
gtcctgggga ccagcgccgc ctccaccgct acctgcagcg actggcatct gagttccctg
ctgagaaget egeageegtg gggetgeagg tggeeteeet gageegggea ggeetgggee
                                                                      780
                                                                      840
aggagctatg ggaggaggcc cggatcaggc atgaggagat ctggatgctc ctggagaagg
                                                                      900
cactgaccca cagetettge ceagaggete cagetgetea eteagegege ceagaacgaa
gaggggtggc agccaagggc cagggtgtga gtgtagaggt cacttccaag gggaggtggg
                                                                      960
atcagectee actagactea etgggeatgg accatttgee aaagteetat tggettetea
                                                                     1020
ggagctgtct cagccaagag tcacacactt gatacctaaa atggcttcag gaatcttcca
                                                                     1080
agactgaaga cttccccagg tgtggtctag ggcctgcctg cctcagagcc atgagcagag
                                                                     1140
ccggtcaaaa ggcttcctag ggaatcctac cccagacatt aaaatagact cttggtgctg
                                                                     1200
gcaggtggct ggaatctgcg tttgtagcca agtgctcttc ctgtgtgact cagcaaagtg
                                                                     1260
ggggtgcatt tggggaacac ccggggctgg ggcctgagtc ctccacccaa agccaggttt
                                                                     1320
                                                                     1380
gattettgca tteccetece tgeetteeat ccagacagge ccaaggatge aagaggegtt
gatcagecca tetecateca tgeetgttge etcagagagg geegaegget tttaaaatge
                                                                     1440
tgttgccata gcaacagcat tccagccagt gggtaccaca ggcagggagc cacagaaact 1500
                                                                     1560
ggggtgctgg gatggaaact gacttgtgag agaccacagc tactgctaga aggaaggggg
gcaaagcggg cacaggtaat ctaagaatac ttgggcggga ggagtcccca aggttacctt
                                                                     1620
                                                                     1680
gtgcatccct ctgtccccag aaagaactgt accccaacaa tctctcccct cactgcatcc
                                                                     1740
cctggggaag aagggaatgc agaaatgaaa tgtcataatg agtaacaatg tataaaaata
                                                                     1771
tegaataata acagetaaca tttettttge a
```

```
<210> 5956
<211> 979
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (927)...(0)
<223> similar to gi386923 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5956
atttgacata gatctcttaa agggaattta ttgcttccat ggagatttta gatccgatgt 60
tactgaggga aattaggtag ctgggcggct ttaccccagg catctcttag taggtaaaca 120
ccttcctttt caggatggga ttcacaaggg cccttggtcg tctggaagca ccaactgaac 180
gcaggcctcg gatgatcaag acggtcccca ccacaatgcc cacgaggccc acagacaacc 240
ccagggcgca gaccacacgt ctctgtgagc tctgactaag gttgttggaa tctcagctcc 300
```

```
ccagtgtttc agaagaggct caaaccaggc ccccagttgc tccacctttg cagttcataa
                                                                      360
atctcatcat tcaaaaggga aggaagggga ggtaacctga tcttgaagaa ggaaatgatc
                                                                      420
actctttgga gaggaaggcc tggtctcaga aacaccttct gtgactgagt gcccattgct
                                                                      480
cagccaggtg atgttgacca caggaggaaa gatgttgtcc acaagacaga tgagggtgtt
                                                                      540
                                                                      600
qqqctqaccc agtgtcacgg gagacttgga aaacactgtg acctcaggaa cctcattggt
agcagcggta gagttggagc gtttaatcac gatgttcaag ttatgtttta gcacagcgat
                                                                      660
                                                                      720
gtttgtcagt gcaaattgcg ggtcaaatct tctaaatctg cggaacagag gcaactgcca
gacagtetee tteeteteea ggteeacata gaacteeteg tetecateaa atteatgget
                                                                      780
gtactgccca gagggaccat aagactggta caagtttaca ccgtaagagg caacatggtc
                                                                      840
                                                                      900
agccacaatg tetteacete cacaaggget cateaeggtg gteagggega gggeeceeag
                                                                      960
catcagaget tigtttagga teatectett cecaaggeag ceteageagt tgetgttetg
                                                                      979
agcgaattcc acgcacact
```

```
<210> 5957
<211> 1682
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (285)...(1476)
<223> similar to gi6002678 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5957
ttttttttt ttgatggagt cttgctctgt cgtcaggctg gagtgcagtg gcgcgatctc
                                                                       60
ggetcactee aacetecace teeegggtte aaaggattee cetgeeteag cetetegagt
                                                                      120
agetgggaet acagatgege getaccacae aaggetaata ttttgtattt tagtagagae
                                                                      180
gggatttcac catgttggcc aggatggtct ccgtctcctg acctcgtgat ctgcctgcct
                                                                      240
                                                                      300
tggcctccca aagtgttggg attacaggca taagccattg cgccatgctc aaggttctta
                                                                      360
attacatett taaaggeest titteeatgt acagtaacat atteaatggt tetggggatt
aggacttgga gccattattc tacctacaac aattagtatt ggacttccat cattttctat
                                                                      420
cactettgta ategagaacg gactatttca etgggagtag caagteataa tgtttgegtt
                                                                      480
ggcatttgtg tgggggttta tcttcattca ttaaataatt gcatgtaaag aaaattcctg
                                                                      540
teactattte aaatgtttea tgtagttatt atagtgette agaateeaaa gggttatgtg
                                                                      600
                                                                      660
ttacttatgt aagatgagca gtctaggggg tggagaacag gtcatctagt gcagattett
cctagctgaa gtgtgttttc tctggggaca accaagtagg atttaattgt tttgcttcct
                                                                      720
tttttgggaa cttagaccca tcttgcgatg tcctaagtct ccaagcatct tatttgacct
                                                                      780
gettatacae atttgaetaa atagetaaat atgaecaeat tgaegtggta aagetttaae
                                                                      840
actititgtcc agaitgaatc acticcating ctaticagita agcagingaa aactightatg
                                                                      900
gaaaagcaaa catgttttga tagatttaat gtgtaaagaa ggtatccata ctctggaatg
                                                                      960
ctgctgatca ataaatgagc tgcaagactt tgttcgaaac aacactcaag cacaactgtt
                                                                     1020
ttactttcca taccaagttt ggctgtgact gaaatgaaga acatcagcat tgatctttgc
                                                                     1080
tttgcacttg tacaagagac tatttgcaga gagccaaata taggcaacag aggatttaat
                                                                     1140
atcttgccaa aaaatacaaa atctgttccc ctttaaagca tggacactct atcctttctt
                                                                     1200
gtgggatett ggetaaaagg aaaatatagg ettttaaaet eeeetattte ettetgttga
                                                                     1260
aagettaaga atetttttea aatgagetat gtatggtttt gtggtatttt atgttteeaa
                                                                     1320
aagaaaatgg ctacatgaaa aatctgtcca gtgttatcat ttttcttaca aaaaatactt
                                                                     1380
ctagttatgg ttgtattaat taatttgatt gtgataatga ttacacaatg tttacctata
                                                                     1440
tcaaatcatc atatcgtata ccttaaatat atataacttt tatgtgtcaa ttataactca
                                                                     1500
```

```
gtaagtctgg gaaaatatcg ttaagtcaaa gattagagtc aacagaaata aagaaaaatc 1560 atactttgat aacttcagga ctaatcaagg atcaatgggt gacatgatat catgctatgt 1620 gccattttgt gttaaacaaa ttacaccaac aataaaaaaa attggcttca atcaaaaaaa 1680 aa
```

```
<210> 5958
<211> 1188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1024)...(585)
<223> similar to gi3169120 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5958
aggacggggc ccctccatac ctggcccttt cccgtgatgt taaggtggca cggccctgaa
                                                                       60
aatatatggg gtagttatcc cacccccgcg ggcagagatt caggaggggg gattgtaaga
                                                                      120
gaegeeetee tetgtaeget egatataaag agaagteeee teecateeet eecatgteee
                                                                      180
                                                                      240
tttatgatat attgagacag ctcagtaaat attttctaaa attatttacc ccctgggggc
                                                                      300
agageetgag cagggaggat gataagggat geeggeetet gtatgattga aataaagaga
aataaccaac totagoágot gtgagtoatt otgááagatg tagagáatac agggactaga
                                                                      360
                                                                      420
agogottata ttotoccaco aaatttgoat acatgacaaa aaacaggoaa aaggoagaga
gacccaaaga egggátttat tgggggeeea agteateace tggaaagtea agaaageett
                                                                      480
tgaagtatte geggggatet teatgatgag caggaacagg geteateatg geaaggaetg
                                                                      540
                                                                      600
tgaataaagt caaaaaactg aactctgttg acctgggcgc accccactgc aggtaacgga
aaagttcccc ctgttcccac agggcaatgc caattacctc ggcccacttc gtaagggtgc
                                                                      660
                                                                      720
acagaacgaa acaaaatctg tccaaaagct gggaacccaa ggaaactttt gggttttaaa
                                                                      780
tecatecate cageaacete aactgtette etegatette cetttecaet catagatgga
                                                                      840
tgtaatetga gggatgaggt tgacgeagge tgetaggege tteteeaeea eggeeetgge
gateteettg gegaeettet egttggggea agtaacaaag getgeagaga eegageeegg
                                                                      900
aacgtagcca gagccggaat ccgaggccgg cgagggctgg gtcggagggc ttccagaggc
                                                                      960
                                                                     1020
catggtcagc aagactcggg gtagcaacaa aaggcgggag gccacaggca gcagcgccgg
catecaaaca aaagacagga geagagagge caeteegeeg ageaggaeeg egggageeeg
                                                                     1080
cccccactc atgcggccta cgctggtaca ggagagttga tctcaaaggc cacacgtcac
                                                                     1140
                                                                     1188
acggagaaac aaccccagga agagcggcct cttcttacct gggtggca
```

```
<210> 5959
<211> 2167
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (559)...(1470)
```

<223> similar to gi416520 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5959
                                                                       60
ggaaccgctg ggagccgggg cccagcgcgt gaggacggag cgcgctgagc gagggggagg
tggctgccgc ttctcccgcg tccgccattt tgttgctgtg gctattggga acaagctggg
                                                                      120
caaaagcacc ccggaggcgc gacgctcctt cgagttcggt gcctcgtgtg acggcggggg
                                                                      180
teggtgaaga eeegtegage tgeggegeeg gegegtteea ggeegggagt eaetggagge
                                                                      240
                                                                      300
acccctgggg acgccgagca gcccgagaac cccggggtgg cctccgctgc ggctcgggtt
tgcctgcccc gaccccccgg ctctgccgtg cattcccggg cggctctctc cgtgtggcgg
                                                                      360
ccccggagca ggcgggcggc gtcggaggat gctgcgggcc cggagccgag aggaaagtgc
                                                                      420
tggcccagcc ctctgagcgc tcctcgaggt gtgcgagagg cccttcctcg gccccaaagc
                                                                      480
                                                                      540
cgtctgccgg gctaaggcgt gcagagcagg cgaggacagc cgccgccct accgccgcag
                                                                      600
agtecceggt ccaacaccat gtecteegee aggttegaet ceteggaeeg eteegeetgg
tatatggggc cggtgtctcg ccaggaggcg cagacccggc tccagggcca gcgccacggt
                                                                      660
atgitecteg teegegatte tieeacetge eetggggaet atgigetgie ggigteegag
                                                                      720
aactogoggg totoccacta catcatcaac togotgocca acogoogttt taagatoggg
                                                                      780
gaccaggaat ttgaccattt gccggccctg ctggagtttt acaagatcca ctacctggac
                                                                      840
accaccacce teategagee tgegeeeagg tateeaagee caccaatggg atetgtetea
                                                                      900
gcacccaacc tgcctacagc agaagataac ctggaatatg tacggactct gtatgatttt
                                                                      960
cctgggaatg atgccgaaga cctgcccttt aaaaagggtg agatcctagt gataatagag
                                                                     1020
aagcctgaag aacagtggtg gagtgcccgg aacaaggatg gccgggttgg gatgattcct
                                                                     1080
gtcccttatg tcgaaaagct tgtgagatcc tcaccacacg gaaagcatgg aaataggaat
                                                                     1140
tccaacagtt atgggatccc agaacctgct catgcatacg ctcaacctca gaccacaact
                                                                     1200
cctctacctg cagtttccgg ttctcctggg gcagcaatca cccctttgcc atccacacag
                                                                     1260
aattgacctg tetttgegaa agcaateeag aaaagagtae eetgtgettt atgacaagae
                                                                     1320
tgccttggca ttagaggttg gtgacatcgt gaaagtcaca aggatgaata taaatggcca
                                                                     1380
gtgggaaggc gaagtgaacg ggcgcaaagg gcttttcccc tttacgcacg tcaaaatctt
                                                                     1440
tgacceteaa aacceagatg aaaacgagtg attgetgttg ceetgtttee tgetgetttg
                                                                     1500
ttgttetgee tgteetagte teetttgaag tgggaaagea ttttetetea taggeaagte
                                                                     1560
acactgcatt gccgaagtcc agctttctgc agactggcag tcgcacacac atttggaatg
                                                                     1620
cacacagegg etgeeteetg atgtttgtat catagtegta ttgtgcaaaq aqtageeqat
                                                                     1680
tttagagttc ttttggatca taaactggaa atactgatgg aagcacacaa gtggagagaa
                                                                     1740
gttgacgtgg aaagggtctt ccttctcatt gctgcccgtt tgtacatggg actgattctg
                                                                     1800
tegtgtteac cagagaaage ttgaggeeat ggegagatac tgeatgtttg etgttecaca
                                                                     1860
aagcagtggc ttagctgcca tcttgctttt ctttggacaa caggaagtga acctggggtt
                                                                     1920
ggggaggtgg ggacagagcc gggcgcagtc gggggcacag ccctgaggcg gggctgaggg
                                                                     1980
ceaggeegee aegteeetgg accetgaaaa egggetegga eeeeegetge agegtggaet
                                                                     2040
ceggtgtggc egeggggegt geaaceegga ceetggeeag eteegtgtee teeagaeett
                                                                     2100
tactcatggc cccgcatcgc caggccgagc tgcaccttcg gtccccgccc gcggcagccg
                                                                     2160
aggtagg
                                                                     2167
```

```
<210> 5960
<211> 1295
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1257)...(861)
```

<223> similar to gi975687 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5960
                                                                    60
120
aacatttaca aattgtacaa agattggtag cttttatatt tttttaaaaa tgctatacta
                                                                   180
agagaaaaaa caaaagacca caacaatatt ccaaattata ggttgagaga atgtgactat
                                                                   240
gaagaaagta ttctaaccaa ctaaaaaaaa tattgaaacc acttttgatt gaagcaaaat
                                                                   ,300
gaataatgct agatttaaaa acagtgtgaa atcacacttt ggtctgtaaa catatttagc
tttgcttttc attcagatgt atacataaac ttatttaaaa tgtcatttaa gtgaaccatt
                                                                   360
                                                                   420
ccaaggcata ataaaaaaag aggtagcaaa tgaaaattaa agcatttatt ttggtagttc
                                                                   480
ttcaataatg atgogagaaa ctgaattcca tccagtagaa gcatctcctt ttgggtaatc
                                                                   540
tgaacaagta ccaacccaga tagcaacatc cactaatcca gcaccaattc cttcacaaag
                                                                   600
teetteeaca gaagaagtge gatgaatatt aattgttgaa tteattteag ggetteettg
                                                                   660
gtccaaataa attatagctt caatgggaag aggtcctgaa cattcagctc cattgaatgt
                                                                   720
gaaataccaa cgctgacagc atgcatttct gcattttagc cgaagtgagc cactgaacaa
                                                                   780
aactettaga geactatttg aacgeatett tgtaaatgta cacteegeaa tttteeceaag
atctatgcca taattcaatg aactccatga acactgcttg tagttgggtg tccaggactc
                                                                   840
                                                                   900
ctcaaagett teeeteagae atteeeeett tteteetttg aateeateee gacetgggat
cccaggtgta cccggaatgc cattggcccc agggctcccg tctcgaccag gcactcctgc
                                                                   960
tggcccttgt aagcacattc cattatacag gtccaccacc tccctctgcc ggagctgcgc
                                                                  1020
ettttgette ceettgggga teteagagge getegaegge gegggeaget geageageag
                                                                  1080
gagcagcagg aggccgcgga gccgctgcgg ggaggcggcg gggccctggg gtcgcatggc
                                                                  1140
teceggetge egggeagege ggagetggag geggaggaga cegaggagag gaaegtggte
                                                                  1200
agegtetgge teegeegege teegaggeeg eegeaggetg cateaatgeg cettteacee
                                                                  1260
gagegeetet eteceteeet taatteetee egeee
                                                                  1295
```

```
<210> 5961

<211> 5694

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (207)...(2938)

<223> similar to gi577301 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5961
ggtctacgaa gaccaagtgg gcaagtttga ttggagacag caatatgttg ggaaggtcaa
                                                                       60
gtttgcctcc ttggaatttt cccctggatc caagaagttg gttgtagcca cagagaagaa
                                                                      120
tgtgattgca gcattaaatt cccgaactgg ggagatcttg tggcgccatg ttgacaaggg
                                                                      180
cacggcagaa ggggctgtgg atgcccatgc tgctgcacgg acaggatgtg atcactgtgt
                                                                      240
ccaatggagg ccgaatcatg cgttcctggg gagactaaca tcgggggcct gaactgggag
                                                                      300
ataaccetgg gacagtggca gtttecaggg caettggget eggttggeet geaggagtet
                                                                      360
gtaaggtaca teegeagtee tgaagaagae tacaettgee etecateaee tetecagtgg
                                                                      420
                                                                      480
gcacctcaag tgggtggaac atcttcccag aaagttgaca gcttccatta ccagatggtg
```

```
taatcttaac ggctctgggg tggtgtgggc ccctcggagt tgttcccttc agcccatgtg
                                                                      540
aacattgtca agtttaatgt ggaagatgga gagattgttc agcaggttag ggtttcaact
                                                                      600
ccgtggctgc agcacctgtc tggagcctgt ggtgtggtgg atgaggctgt cctggtgtgt
                                                                      660
                                                                      720
cctgacccga gctcacgttc cctccaaact ttggctctgg agacggaatg ggagttgaga
                                                                      780
cagateceae tgeagtetet egaettagaa tttggaagtg gatteeaaee eegggteetg
                                                                      840
cctacccage ccaaeccagt ggacgettee egggeecagt tetteetgea ettgteecca
                                                                      900
agccactatg ctctgctgca gtaccattat ggaacgctga gtttgcttaa aaacttccca
                                                                      960
cagactgccc tagtgagctt tgccaccact ggggagaaga cggtggctgc agtcatggcc
tgtcggaatg aagtgcagaa aagtagcagt tctgaagatg ggtcaatggg gagcttttcg
                                                                     1020
gagaagteta gtteaaagga etetetgget tgetteaate agacetacae cattaaceta
                                                                     1080
                                                                     1140
tacctogtgg agacaggtcg gcggctgctg gacaccacga taacatttag cctggaacag
                                                                     1200
ageggeacte ggeetgageg getgtatate caggtgttet tgaagaagga tgactcagtg
ggctaccggg ctttggtgca gacagaggat catctgctac ttttcctgca gcagttggca
                                                                     1260
                                                                     1320
gggaaggtgg tgctgtggag ccgtgaggag tccctggcag aagtggtgtg cctagagatg
gtggacetee ceetgactgg ggcacaggee gagetggaag gagaatttgg caaaaaggca
                                                                     1380
gcaattcaag atggcttgct ggggatgttc ctgaaacgcc tctcgtctca gcttatcctg
                                                                     1440
                                                                     1500
ctgcaagcat ggacttccca cctctggaaa atgttttatg atgctcggaa gccccggagt
                                                                     1560
cagattaaga atgagatcaa cattgacacc ctggccagag atgaattcaa cctccagaag
atgatggtga tggtaacagc ctcaggcaag ctttttggca ttgagagcag ctctggcacc
                                                                     1620
                                                                     1680
atcetgtgga aacagtatet acceaatgte aagceagaet ceteetttaa actgatggte.
cagagaacta ctgctcattt cccccatccc ccacagtgca ccctgctggt gaaggacaag
                                                                     1740
                                                                     1800
gagtegggaa tgagttetet gtatgtette aateecattt ttgggaagtg gagteaggta
getececcag tgetgaageg ecceatettg cagteettge tteteceagt catggateaa
                                                                     1860
                                                                     1920
gactacgcca aggtgttgct gttgatagat gatgaataca aggtcacagc ttttccagcc
                                                                     1980
acteggaatg tettgegaca getacatgag ettgeceett ecatettett etatttggtg
gatgcagagc agggacggct gtgtggatat cggcttcgaa aggatctcac cactgagctg
                                                                     2040
                                                                     2100
agttgggage tgaccattee eecagaagta cageggateg teaaggtgaa ggggaaaege
ageagtgage acgtteatte ceagggeegt gtgatggggg accgeagtgt getetaeaag
                                                                     2160
agectgaace ccaacetget ggeegtggtg acagagagea cagaegegea ccatgagege
                                                                     2220
                                                                     2280
acctttattg gcatcttcct cattgatggc gtcactgggc gtatcattca ctcctctgtg
cagaagaaag ccaaaggccc tgtccatatc gtgcattcag agaactgggt ggtgtaccag
                                                                     2340
tactggaaca ccaaggctcg gcgcaacgag tttaccgtac tggagctcta tgagggcact
                                                                     2400
                                                                     2460
gagcaataca acgccaccgc cttcagctcc ctggaccgcc cccagctgcc ccaggtcctc
                                                                     2520
cagcagtect atatettece gteetecate agtgecatgg aggecaceat caccgaacgg
                                                                     2580
ggcatcacca gccgacacct gctgattgga ctaccttctg gagcaattct ttcccttcct
                                                                     2640
aaggetttge tggateeceg eegeeeegag ateecaacag aacaaagcag agaggagaac
                                                                     2700
ttaatcccgt attctccaga tgtacagata cacgcagage gattcatcaa ctataaccag
acagtttete gaatgegagg tatetacaca geteeetegg gtetggagte caetigtttg
                                                                     2760
gttgtggcct atggtttgga catttaccaa actcgagtct acccatccaa gcagtttgac
                                                                     2820
gttetgaagg atgactatga etaegtgtta ateageageg teetetttgg eetggttttt
                                                                     2880
gccaccatga tcactaagag actggcacag gtgaagetee tgaateggge etggcgataa
                                                                     2940
agaacaaaga ctgtgcctaa aagtggagag ccaggggagt gtgggtcaga taagcagcta
                                                                     3000
                                                                     3060
cagctgcagt ttggtggatt ggtggagtat gtgtgtgtgt cagtgctcag ctaagaactg
tagggaagat ggatgacctt cacgcagaac tcctttttgg gatatacatg aatgcagaaa
                                                                     3120
ggateettae atgggagaga agacagaact eteteaaget gacactetea gagatteetg
                                                                     3180
                                                                     3240
atgggeettt etetttgaag teeaaaggge gtetgeattg etteetttet ttgeeeatee
                                                                     3300
atgaatgttc tgttttgttt tgtttttttt aataagaatt ccggctgatt tttgtgaggc
                                                                     3360
ctgtttaaat tgactttact ttgccttttg tgtttctcaa ttttatctag aaatctttct
                                                                     3420
gactttttcc atctcttgct tcaaagtaag aggggaactc tccttgccga ctccacctta
taggtacatt tggtgttttg cactgggaag aaataggatc catccttagc tgaggcttga
                                                                     3480
                                                                     3540
ggactgatcc agcctctcat ggcttccctc caaagtaact tagggttgag ggatctatat
                                                                     3600
gtgatgtcaa aacttacttt aaacctctag tttcgtgctg tcatttatta ggctgggcca
                                                                     3660
ccaaatettt gtttcaattt atcagaagee aagtgcatae tagegtettg tttgttgeee
                                                                     3720
attgcctata cttttcacct gagatgtgtg agttggggcc ttttaaaaac tactgaattg
tctgagcctt gaagacattt ccagggagaa gagataatct ctcatttcac ccacaggctg
                                                                     3780
gtctaatcat aacctagtta aagatgtcct tgtttaagaa ccccattatt tatttttagt
                                                                     3840
ttttaatata aattaacatg tgggtcatta tatttctcct taaatgagga aattttaaat
                                                                     3900
```

```
tttattgatc taacctttga agctttaaaa aaggagaaag agggtagggg tgggaaactg
                                                                     3960
gcatactgtg tgtatagcac tgccgattgg ctaggccact gtgtctctgc tacaaattaa
                                                                     4020
agaaatccta aaagttttcc ttggtcatag agttggggaa tgacagaatt tttctttgtt
                                                                     4080
                                                                     4140
gtgaaatgta tgtacagagt agaccattct ctaggccctg tgggtggaaa gaggtacact
                                                                     4200
cgaatgtttg cataaagcaa gtgacaaatg acactgttta agtcctcttt tgtgtcttag
                                                                     4260
aagatcattt tgaggctatt ttcacattag aggggataaa agcagtgaag acatggagta
                                                                     4320
agtgtatttt attttagtaa ggaaaggtca gtttaatcat atatgggttg gttaggttat
                                                                     4380
ctaaaaattt gtcatctttc tatggtcata tgctgatggt agattatggc agagaaggaa
gaggaaatga caaccatttt attaattgtc agtttgatat tgagtgactg aatgtctaag
                                                                     4440
aatotocaga aaaaaacagg catotatoat ootgacocaa ggcatatttt aacataacot
                                                                     4500
gggagaagag agttaagtac aagttaaaaa aaattctgcc ctagttttga gaaagcctgg
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tatttaccag tgtgccagaa tctgaaacaa gctactggga gggaaggtat ttgtccttta
                                                                     4680
                                                                     4740
gtaaaattcc ctgtatttca gctgtaatca aagttacctc aaagcaggtg ctttttttt
ttttgagacc ctggctcaaa aacaaaaaca aaaactagtt tgttttagta ttcattaatt
                                                                     4800
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acgtatatga gcactggtag tctagtgttt gttcttgtat acagtgtttt cttaaatgag
atgatgctat ttaattctgt tacttgtttt ttcaactaat ggatctttta aagtttttta
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tttaaatttt ttgtgggtac atattaggta catatactta tggggtacat gagatgtttt
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                                                                      5040
tataaagget cagetaatgt atettgaata teatgtatte ataaagatga etgaaatagt
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teegtaagge atettteaat ttgaaaattt cataattgta attteaetge etttataaat
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tgcttttttt ttggaggcag ggtctctgtc acccaggctg gagagcagtg gcacagtcat
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tgccgggatt acaggcatga gctactgcac ctggcccata aattgtcata cttttaaaga
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gcctattaca caaagtatca tcagaatcat cccaagactc atttcctgat tcctaattat
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aggccagggc aggcggatca tttggggtcg ggagtttagg accagcctgg ccaacatggt
                                                                      5580
                                                                      5640
gaaacctgaa gccccatctc taccaaaaaa ataaaggaat ttagccgggt gtggtggtgc
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atgeetgtag teeeggetae ttgggagget gaggeaggag aategaacee agga
```

```
<210> 5962
<211> 2014
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1452)...(2009)
<223> similar to gi1420583 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 5962

ttttttttt ttactgttt atccaaatt attctcaggg aaaaagaaag tagtggctct 60
acgcaactt ttcattcacc aaccacttt ccatgcatca gaacctatgc tgtgattgtt 120
agctgaactt caatagtttc cacctactta agagagatgc ctcaaacaaa ttaactttat 180
tttcagacaa caggtccaag aagacttcac agctcaatca tgacgaacat gtggctgttt 240
cctcacagcc aggaaccctc ggtattagaa gaaaactcca acccccaca ccatcatcta 300
gcctcttttc tcactgtgaa gaactgatga gacagaattc ctgagaaggg aacatttagg 360
taatctggga tagaagggca tggaaggact ggacaaaact aaggcctccc catggaagga 420
```

```
agggaaaaga atattacaaa acagactaac cagaaaaacc aagaccccat caagtatcct
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tcagggataa aacaagaggc cactcctaga tgcctcctga ttaaaaggtt gtcccatgcc
                                                                      540
ctacagaggc ggaggataaa tcctaagaaa cagaaatgta taaccagccc caatgcttcc
                                                                      600
                                                                      660·
catacttctg cattaggtca gtgtgaacat ggctttgctc ccaatggtca gacctgacat
                                                                      720
qqqtccttct qaagatggtg ggtcaggtat atcccagcca ccctcaccag agaatacatc
tatgacaaac ccaaattcct aatcctgaag tactttgagc cactctacat tgtggccact
                                                                      780
                                                                      840
caataataga ataaatttgt gaaaaagctg catgttttaa tttaggaaat gagtagaagt
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geteaggete tgeagaatea etgtgteeag tgetteetga gatgttettt cagetgagga
atggaaggca gcagctgctg gcactcatga caacgaaggg gcagcttcaa gagctcaggc
                                                                     1020
                                                                     1080
ateceatete ggacagttae tetaceagee tettgtaeca tetegateae agettgtgat
tctaggaagt attctgtatt gaaagaattc caatgttttt tgtttttaag gcaaggagaa
                                                                     1140
tcaaaatcct ggctgatcac atgaagatgt acatggctca tactcggaat ggcgtggtag
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                                                                     1260
cccaatcgga agcggagttt gctggaccca gcaaaatcta caatcacctt ttcccccaca
gtgtgcatat gcttaaggag ttcaaggtgt tcccctggcc acagccttca gactggaaat
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ggaggtccac ggtaagacca gccaatggta acgggccttt gggtatttat cctttatcac
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cacagageat tggccagagt tgctcccagg ttccagccct gtcccagcct cagettcctg
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caggecaggg ttetttgeet etteeteaaa etetacaata tatggataaa gtteatteae
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catgtggaga acctggccag gctgcagctt cacctcttgg tccttcccaa ttacgactga
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gteaatgetg gtgggattga etectacetg etttacettg acatatecet tgttacacte
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tgctttcaac tgtacttgct gtcgagaaca tttcttatca gtgatcttgg tctctgggcc
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acgeccaatc acaactgett ccaaatgtgg aagtetgatt egetggtgee ggetgteetg
                                                                     1920
teteaceaae cageacaeee geateateae tetecagaag teggagaegg acaaatteae
                                                                     1980
                                                                     2014
cctcgtgcca agcatggcgg aatgcatcta acag
```

```
<210> 5963
<211> 542
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (463)...(403)
<223> similar to gi4678534 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5963
gacgtccggg tttacccacg cgtccgccca cgcgtccgaa gtgctgaaga aggtactgga
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atgtaacaag gaagaggtac ccaacaagga tgaactggtt ggaaacttgt atagctgcat
                                                                      120
agggaatgcc cagattgagc tggggcagat ggaggcagcc ctgcagagcc acagaaagga
                                                                      180
cetggagate gecaaggaat atgacettee tgatgeaaaa tegagageee ttgacaacat
                                                                      240
tggcagagtt tttgccagag ttgggaaatt ccagcaagcc attgacacgt gggaagaaaa
                                                                      300
gatecetetg geaaaaacea eeetggagaa gaeetggetg tteeaegaga teggeegetg
                                                                      360
ctacttggag ctggaccagg cctggcaggc ccagaattat ggcgagaagt cccagcagtg
                                                                      420
tgccgaggag gaaggggaca ttgagtggca actgaatgcc agtgttctgg tggcccaggc
                                                                      480
acaagtgaag ctgagagact tcgagtcagc cgtgaacaat tttgagaagg ccctggagag
                                                                      540
                                                                      542
ag
```

```
<210> 5964
<211> 1224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1206)...(51)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5964
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gagtttgaga ccagcctggc caacatggca aaaccccatc cctacaagaa atataaaaat
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tagetggget tggtagtaca egeetgtaat eccagetact aettgggagg etgaggeatg
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tgaattgctt gaacccaaga gacataggtt gcagtgagcc gagaccacgc cactgcactc
                                                                      240
cagcctgggc aatggagtga gactctgtct caggaaaaag aaaaataaat gaagcataag
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cattgaaaat gaggggtcag agtgtcttta cttacattat actaatgtga aattccctat
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gtgagaggtg tagtaattga gttggggtgg ctacgtggaa tagtttataa agggagtttg
                                                                      420
catgaatttt ggcaataagc agaccagcat aaataaatgg tgcacatttc actttctttt
                                                                      480
ccactettte cagaggegea ggaattggtg ggettggeat aactgttgag ggaccateag
                                                                      540
agtogaagat aaattgoaga gacaacaagg atggoagotg cagtgotgag tacattoott
                                                                      600
tegegeeggg ggattaegat gttaatatea eatatggagg ageeeacate cetggtgage
                                                                      660
tatteeteag agaggaeeee agagaataat tgattttgea ggaaaatggg tttgattttg
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cttatctctc tgagtgggga aaacaatctg atatttgtaa tagctgcaaa aggagagttt
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ttcttagggc tacatctcca agattatctc aactcccagt agaaccggta acatggcaaa
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aagcatcggc ttagaatttt gactggaaac agttgtgcgt gtgttggagg acctagttct
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tgattcaggg gaaagctggt tctttacaaa gttgaaaatc acagtggctc acacctgtaa
                                                                      960
tecécaaaét tigggaggee aaggeatgea gatigetiéa ggicaggagt tigagaceag
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cccaggcaac atggggaatc cccatcttta caagaaatac aaaacttagc tgagtgtgat
                                                                     1080
ggtgcgtgcc tgtaatccta gctatgtggg gtgggggctg tgatgggacg atgtctgaga
                                                                     1140
tgggagcctg ggaggttgag tgagctgaga ttgcgccact gcgctccagc ttgggtgaca
                                                                     1200
gaggaagacc ctgtctcaaa aaaa,
                                                                     1224
```

```
<210> 5965
<211> 8182
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (225)...(7912)
<223> similar to gi2181867 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5965 tgacttatcc gctcgaccca cgcgttcgag acagtggtac cttttttcct tttaggtgat 60 qaaatqqtct ctqcaaqatq ttttqttctt qaattggaaa tttttaaggc tqatatatqc 120 tggtacttca tcttctatat gtggactata atttcttccc ttaggataac tacataaaga 180 gacaaaaaaa agaaaaaaga gcaaagatct gtgctgtgtc aagtatgaca gccatcactc 240 atggetetee agtaggaggg aaegaeagee agggeeaggt tettgatgge eagteteage 300 atctcttcca acagaaccag acttcatcac ctgattcttc caatgagaat tccgtagcaa 360 ctcctcctcc agaggaacaa gggcaaggtg atgccccacc acagcatgaa gatgaagagc 420 ctgcatttcc acatactgag ctggcaaacc tggatgacat gatcaacagg cctcgatggg 480 tggttcctgt tttgccaaaa ggggaattag aagtgctttt agaagctgct attgatctta 540 gtgtaaaagg ccttgatgtt aaaagtgaag catgccaacg tttttttcga gatggactaa 600 caatatettt cactaaaatt ettatggatg aggetgtgag tggetggaag tttgaaatte 660 atagatgtat tattaacaat actcatcgcc tagtggagct ttgtgtggcc aagttgtccc 720 780 aagattggtt tecaetteta gaactteteg ceatggeett aaateeteac tgeaagttte atatetacaa tggtacaegt cegtgtgaat taattteete aaatgeteag ttgeetgaag 840 aagaattatt tgctcgttct tcagatcctc gatcaccaaa aggttggcta gtggatctca 900 tcaataaatt tggcacatta aatgggttcc agattttgca tgatcgtttt tttaatggat 960 cagcattaaa tattcaaata attgcagctc ttattaaacc atttggacaa tgctatgagt 1020 ttctcagtca acatacactg aaaaagtact tcattccagt tatagaaata gttccacatt 1080 tattggaaaa cttaactgat gaagaactga aaaaggaggc aaagaatgaa gccaaaaatg 1140 atgecettic aatgattatt aaatettiga agaaettage ticaagaatt teaggacaag 1200 atgagactat aaaaaatttg gaaattttta ggttaaagat gatactcaga ttgttgcaaa 1260 tttcctcttt taatggaaag atgaatgcac tgaatgaaat aaataaggtt atatctagtg 1320 tatcatatta tactcatcgg catagtaatc ctgaggagga agaatggctg acagctgagc 1380 gaatggcaga atggatacag caaaataata tettatecat agtettgcaa gacagtette 1440 atcaaccaca atatgtagaa aagctagaga aaattcttcg ttttgtgatt aaagaaaagg 1500 ctettacatt acaggacett gataatatet gggeageaca ggeaggaaaa catgaageca . 1560 1620 ttgtgaagaa tgtacatgat ctgctagcaa agttggcttg ggatttttct cctggacaac ttgatcatct ttttgattgc tttaaggcaa gttggacaaa tgcaagtaaa aagcaacgtg 1680 aaaagctcct tgagttgata cgccgtcttg cagaagatga taaagatggt gtgatggcac 1740 acaaagtgtt gaaccttctt tggaacctgg ctcagagtga tgatgtgcct gtagtacatc 1800 atggacettg etettagtge ecacataaaa atactagatt atagttqtte ecaggatega 1860 gatgcacaga agatccagtg gatagatcac tttatagaag aacttcgcac aaatgacaag 1920 tgggtaattc ctgctctgaa acaaataaga gaaatttgta gtttgtttgg tgaagcatct 1980 caaaatttga gtcaaactca gcgaagtccc cacatatttt atcgccatga tttaatcaac 2040 cagetteaac aaaateatge titagttact tiggtageag aaaacettge aacetacatg 2100 aatagcatca gattgtatgc tggagatcat gaagactatg atccacaaac agtgaggctt 2160 ggaagtcgat acagtcatgt tcaagaagtt caagaacgac taaacttcct tagattttta 2220 ctgaaggatg gccaactgtg gctctgtgct cctcaggcaa aacaaatatg gaagtgctta 2280 gcagaaaatg cagtttatct ttgtgatcgt gaagcctgtt ttaagtggta ttccaagtta 2340 atgggggatg aaccagactt ggatcctgat attaataagg acttctttga aagtaatgta 2400 cttcagcttg atccttccct tttaactgaa aatggaatga aatgctttga aagatttttc 2460 aaagctgtca attgtcgaga aaggaaacta atagcaaaaa gaagatccta tatgatggat 2520 gatttggaat taattggact agactacctt tggagggttg tgattcagag tagtgacgag 2580 attgctaaca gagctataga tcttcttaaa gagatataca caaaccttgg cccaagatta 2640 aaagccaatc aggtggttat ccatgaagac ttcattcagt cttgctttga tcgtttaaaa 2700 gcatcatatg atacactgtg tgtttttgat ggtgacaaaa acagcattaa ttgtgcaaga 2760 caagaagcca ttcgaatggt tagagtatta actgttataa aagagtacat taatgaatgt 2820 gacagtgatt atcacaagga aagaatgatt ttacctatgt cgagagcatt ttgtggcaaa 2880 cacctetete ttatagtteg gtttecaaac cagggcagac aggttgatga gttggatata 2940 tggtttcata cgaatgacac aattggttca gtacggcgat gtattgttaa tcgtattaaa 3000 gccaatgtag cccacaaaaa aattgaactt tttgtgggtg gtgagctgat agattctgaa 3060 aatgacagaa agctaattgg acaattaaac ttaaaagata aatctctaat tacagccaaa 3120 cttacacaaa taaatttcaa tatgccatca agtcctgata gctcttccga ttcctcaact 3180

```
gcatctcctg gaaaccaccg taatcattac aatgatggtc ccaatctaaa ggtggaaagt
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```

```
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acactaaatc tottgagaag ggaagtttca gagcatggac atcatttaca gcaatatttt
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tatcagtatg ctgaattagg caagttatat tcagtagtgt ctcagctgat tcgttgttgc
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                                                                     7140
                                                                     7200
catcaaatta cttcgctttt tgctcttggg agaatcctca gttctcatct actgtcctca
                                                                     7260
gcgaacttct ctggcaggtt gcatattcat atacctatga acttcggcca tatttagatc
tacttttcca aattttactg attgaggact cctggcagac tcacagaatt cataatgcac
                                                                     7320
ttaaaggaat tccagatgac agagatgggc tgttcgatac aatacagcgc tcgaagaatc
                                                                     7380
actatcaaaa acgagcatat cagtgcataa aatgtatggt agctctattt agcagttgtc
                                                                     7440
ctgttgctta ccagatctta cagggtaacg gagatcttaa aagaaaatgg acctgggcag
                                                                     7500
                                                                     7560
tggaatggct aggagatgaa cttgaaagaa gaccatatac tggcaatcct cagtatagtt
acaacaattg gtctcctcca gtacaaagca atgaaacagc aaatggttat ttcttagaaa
                                                                     7620
gatcacatag tgctaggatg acacttgcaa aagcttgtga actctgtcca gaagaggagc
                                                                     7680
                                                                     7740
cagatgacca ggatgcccca gatgagcatg agccctctcc atcagaagat gccccattat
                                                                     7800
atcctcattc acctgcctct cagtatcaac agaataatca tgtacatgga cagccatata
caggaccage ageacateae ttgaacaace etcagaaaae aggecaaega acacaagaaa
                                                                     7860
                                                                     7920
attatgaagg caatgaagaa gtatcctcac ctcagatgaa ggatcagtga aaagcaataa
ttaactqctt cctttatgac tatgcactaa ggtcttatag tccaaacttt ctctgtgtct
                                                                     7980
                                                                     8040
qqctaqtatt qaaaactaga taaactgctc caaaccaaca tggagtaaag agcatattca
ctggtttatt tgcagtaatt tgcaatttgt cagtgtataa gacacatgca gggtgaagtg
                                                                     8100
tacagagttt tgtaacaaat gactggtcct aatctgtaaa tgagaaaggt atatatacta
                                                                     8160
                                                                     8182
tgttaatgtc tgactgttaa tt
```

```
<210> 5966
<211> 5332
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (506)...(4870)
<223> similar to gi407099 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5966
                                                                       60
etteattete teatecaget eeteggeete ateggaacat tteeaceace attacteett
tggaaactgg tggcccggtt ccttcaaggg gcacaggatg tctttgcctt tttatcagag
                                                                      120
gtgccaccag cactatgatc tcagctaccg caacaaggac gtgcgcagca ccgtgagtca
                                                                      180
ctaccagegg gagaagaaac geteegeegt etacaeeeag ggeteeaegg eetacageag
                                                                      240
                                                                      300
cegeteetee geegegeace geegggagte egaggeette egtegggegt eegeeteete
cteccaqeaq caqqeeteqe ageaegeett qagetetqaa gteagteqqa aggeageete
                                                                      360
                                                                      420
agectaegat tatggeteet eccatggact tacagattee agtetgetgt tagatgatta
ttcatccaag ttgagcccca aaccaaagag agccaagcac agcctactgt ctggagaaga
                                                                      480
                                                                      540
gaaagaaaat ttgcccagtg actacatggt acccattttc tcaggacgtc aaaagcatgt
                                                                      600
cagtggaatt actgatacgg aagaagaaag aattaaggaa gctgctgctt atatagccca
```

```
gaggaatett ettgetagtg aggaaggaat cacaacacet aaacagteca eggcatecaa
                                                                      660
gcagaccacg gcatctaagc agtccacggc atccaagcag tccacagcat ccaagcagtc
                                                                      720
cacggcatcc aggcagtcca cggcatccag gcagtctgtg gtttccaaac aggccacatc
                                                                      780
cgctcttcaa caggaagaaa cttctgaaaa gaagtcaagg aaagttgtga ttcgaggaaa
                                                                      840
ggcagaacgc ctgtccctga ggaaaacatt agaagaaacc gagacatatc atgccaagct
                                                                      900
gaatgaagac catcttctcc atgctcctga gtttatcatt aaacctcgct cccacacggt
                                                                      960
ttgggagaag gagaatgtaa aattgcattg ctccatagca ggatggccag aacctcgtgt
                                                                     1020
cacgtggtat aaaaaccagg tgccaataaa tgtccatgca aaccctggaa agtatattat
                                                                     1080
tgagagtcga tatggaatgc acactctgga gattaatgca tgtgattttg aagatacagc
                                                                     1140
                                                                     1200
tcagtaccgg gcctcggcga tgaatgttaa aggagagctt tcggcatatg cttcagttgt
ggtaaaaagg tataagggag agtttgatga gactcgcttc catgctgggg cttccaccat
                                                                     1260
gcccctcagc tttggtgtga ccccatatgg ttatgcatcc cggtttgaga tccactttga
                                                                     1320
tgacaaattt gatgtgtctt ttgggagaga gggagagaca atgagtctag gctgacgagt
                                                                     1380
tgtcatcact cctgaaatta aacatttcca gccagagatc cagtggtaca gaaacggagt
                                                                     1440
acctctttct ccatcaaaat gggtgcaaac actttggagt ggagagcggg caacgctgac
                                                                     1500
attttcccat ctcaacaaag aagatgaagg cctctataca atccgtgtac ggatgggaga
                                                                     1560
                                                                     1620
atattatgaa caatatagtg cttatgtctt tgttcgagat gctgatgcag agattgaagg
agccccagct gctcccttgg atgtgaagtg cttggaggcc aacaaagatt atatcatcat
                                                                     1680
                                                                     1740
ctcctggaaa cagccagctg tcgatggagg gagtcctatt ctcggatatt ttattgataa
gtgtgaggtg ggcacagata gctggtcgca gtgcaatgac acacctgtga agtttgctcg
                                                                     1800
ttttcctgtc actggattga tcgaaggtcg ttcctatatc ttccgagttc gagctgtgaa
                                                                     1860
taaaatggga ataggtttcc catctcgagt ttccgagccc gtggctgctc tggatccggc
                                                                     1920
                                                                     1980
tgagaaaget agaettaaaa gtegeeeete ageaeeetgg actggacaga teattgttae
tgaagaggaa cettcagagg gtattgtgce tggccccccg acagacetet etgtcactga
                                                                     2040
ggccacccgg agctatgtgg tgctcagctg gaagccccct ggccagcgtg gtcatgaggg
                                                                     2100
cattatgtac tttgtggaaa agtgtgaggc aggaacagaa aactggcagc gagtgaacac
                                                                     2160
ggagetecet gtgaagtete eeegetttge tetgtttgae ttggeegagg ggaaateeta
                                                                     2220
                                                                     2280
ctgtttccgt gtccgctgtt ctaattctgc aggagttggt gagccctcag aggcaacgga
ggtgactgtg gtaggggaca aacttgatat ccccaaggct cctggcaaaa tcatcccaag
                                                                     2340
                                                                     2400
cagaaacaca gacacctcag tggtagtttc gtgggaggag tccaaagatg ccaaagagct
                                                                     2460
ggtegggtac tacatagagg caaaegttge tggetetgge aagtgggage cetgtaacaa
                                                                     2520
caaccccgtg aaaactcacc gattcacttg tcatggatta gtgactggtc agagttatat
                                                                     2580
tttccgggtc agagcagtca atgcagctgg acttagtgaa tattcccagg attcagaagc
tattgaagtc aaagctgcta ttgcaccacc atctccaccc tgtgatatca cctgtcttga
                                                                     2640
                                                                     2700
aagttttcgt gactcaatgg ttcttggatg gaagcaacca gataagattg gaggggcaga
                                                                     2760
aattactggc tattatgtga actatcgcga ggtcattgat ggggtaccag gaaaatggag
                                                                     2820
agaagccaat gtcaaggctg tcagtgagga ggcatacaag attagcaact tgaaggaaaa
                                                                     2880
catggtgtat cagttccaag tggcagccat gaacatggct gggctgggcg cgccctccgc
                                                                     2940
agtaagegaa tgetteaaat gtgaagagtg gaccategee gteecaggae cacegeacag
                                                                     3000
totcaagtgt agtgaagtca ggaaagactc actggttotc cagtggaagc cgccagtcca
                                                                     3060
ctccgggcgg actccggtca ctggttactt cgtggacttg aaggaggcca aggccaaaga
                                                                     3120
agaccagtgg cgagggctca atgaggcggc tattaaaaac gtatacctga aggttcgagg
                                                                     3180
cctcaaggag ggcgtcagct acgtgttccg tgttcgagcc ataaaccagg cgggagttgg
gaagccatct gaccttgctg gccctgttgt ggcagagacc cgtccaggaa ccaaagaggt
                                                                     3240
                                                                     3300
tgttgtaaat gtggatgatg atggagtcat ttcattgaac ttcgagtgtg ataagatgac
                                                                     3360
tecaaagtee gagtteteet ggteeaaaga ttatgtatee actgaggaet etecacgatt
ggaagtcgaa agcaagggca acaagacgaa aatgaccttc aaagaccttg ggatggatga
                                                                     3420
                                                                     3480
cttgggtatt tactcttgcg atgtaacaga cactgatgga atagcatcaa gctacttaat
agatgaggaa gaattgaaac gtttacttgc tctcagccat gaacacaagt tcccaactgt
                                                                     3540
cccagttaaa tcagagttgg cagttgaaat tttggagaaa ggccaggtcc ggtttttgga
                                                                     3600
tgcaggctga gaaactgtct ggcaatgcca aagtcaacta catatttaac gagaagggaa
                                                                     3660
tttttgaagg cccgaaatat aaaatgcata ttgaccgaaa cactggcatc atcgaaatgt
                                                                     3720
tcatggaaaa gctacaggat gaggatgagg gaacgtacac tttccagctt caagatggaa
                                                                     3780
aagcaactaa ccattctact gttgttctcg ttggagatgt tttcaaaaaag ctccagaaag
                                                                     3840
aagctgaatt ccagcggcaa gaatggatca ggaaacaagg tcctcacttt gttgagtatt
                                                                     3900
tgagctggga agtgactggt gaatgtaatg tactattgaa atgcaaggtg gcaaatatta
                                                                     3960
agaaggagac tcatattgtg tggtacaaag atgagaggga gatatcagtg gatgaaaagc
                                                                     4020
```

```
atgactttaa ggatggtata tgtaccctgc ttataacaga gttttccaag aaagatgctg
                                                                     4080
ggatttatga agttatcctg aaagatgacc gaggaaaaga taagagcaga ctgaagcttg
                                                                     4140
                                                                     4200
tggatgaagc ctttaaggaa ctgatgatgg aagtatgcaa aaaaatagct ttgtctgcta
                                                                     4260
cagacctgaa aatccagagc acagccgagg gcatccaact gtactctttt gtaacttact
                                                                     4320
atgtggagga tttgaaagtt aactggtccc acaatgggtc cgccattagg tactcagaca
                                                                     4380
gagttaaqac cggggtcact ggagagcaga tctggctaca aatcaacgag cccaccccga
                                                                     4440
atgacaaagg gaagtatgtc atggagctct ttgatggcaa aactggacat cagaagacag
                                                                     4500
tggatctctc tggacaagca tacgatgagg cttatgctga attccagagg ttgaaacaag
ctgccattgc cgagaaaaat cgtgcccggg tgttgggagg tctcccagac gtggtcacca
                                                                     4560
                                                                     4620
tocaggaggg gaaggccctt aatctcactt gcaacgtgtg gggagacccg cctccggagg
                                                                     4680
tgtcgtggtt gaagaacgag aaggccctgg cctcagacga ccactgcaac ctcaagttcg
                                                                     4740
aggctgggag gaccgcgtac ttcaccatca acggcgtgag caccgctgac tcgggcaaat
                                                                     4800
acgggctggt tgtgaagaac aagtatggct cggagaccag cgacttcacc gtcagcgtgt
tcatcccaga ggaggaggcg aggatggccg ccttggagtc cctgaaaggc ggcaagaagg
                                                                     4860
ccaagtgacc ggaggtgcga ggagagccag ccggcctgtg tgacttgggt gtgaatggtt
                                                                     4920
tgggttaagg atgagacgtc ttcatgcttt ctcctcccta ttattttctg gcttgagggg
                                                                     4980
aaaataatgt caggtctttc actcatataa aaaagcacca actaatgaca ctttaattgt
                                                                     5040
ttttctttat ctacaaaatt atgtgttaag aaaataccat tcatagcatg aagattagga
                                                                     5100
aacagtttta aggagaagac ttgaatgaag ttggagggac attgaatgat ggtcagaggg
                                                                     5160
dagacgaatg tgtcgtgggg cgaattggga tttgctgcag ctgtgaagcc atggccgtgt
                                                                     5220
ctcgtgtgtt gttacagagg tgatgtgctt ttcgacgggc gcctcgtggc ttggaacctc
                                                                     5280
ctctgtatga ataaacagtt ttcacgtctg tcctcttccc cgaaaaaaaa aa
                                                                     5332
```

```
<210> 5967
<211> 1679
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (85)...(1199)
<223> similar to gi4972090 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5967
geogetttte eegecteege eggggeegag eegetgtteg getgacagtt gaggatggee
                                                                       60
ggagccgagg gcgccgctgg gcggcagtcg gagctggagc ccgtggtatc gttggtcgac
                                                                      120
gtccttgagg aggacgagga gctggagaat gaggcgtgcg ctgtcctggg cggcagcgac
                                                                      180
tccgagaagt gctcctactc tcagggctca gtaaagagac aagcactata tgcctgtagt
                                                                      240
acctgcaccc cagagggaga agaaccagca ggaatttgtt tagcttgcag ttatgaatgt
                                                                      300
catggaagtc acaaactatt tgagctatac acaaaaagaa attttcgttg tgattgtgga
                                                                      360
aacagcaagt ttaaaaattt ggaatgcaaa ttacttcctg acaaagcaaa ggtaaattct
                                                                      420
ggcaataagt acaatgacaa ettttttgga ttgtactgca tttgcaagag acettateet
                                                                      480
gatcctgaag acgagattcc agatgagatg atccagtgcg tagtctgtga agactggttc
                                                                      540
catggaaggc atcttggtgc cattccccct gagagtgggg attttcagga gatggtatgc
                                                                      600
caggcctgca tgaaacgttg ttcttttttg tgggcttatg ctgcacaatt ggcagtaacc
                                                                      660
aaaatatcca ctgaggatga tggattggtg cggaacattg atggaatagg tgatcaggaa
                                                                      720
gttatcaaac ctgaaaatgg agagcatcaa gatagtaccc tcaaagagga tgttccagaa
                                                                      780
cagggaaagg atgatgtccg ggaggttaaa gtagagcaga acagtgaacc atgtgccggc
                                                                      840
tctagttctg aatctgatct ccagacagtg tttaagaatg aaagcctcaa cgcagaatca
                                                                      900
```

```
aaatctggct gcaaacttca ggagcttaaa gctaagcagc ttataaagaa agacactgcc
                                                                      960
acctattggc ccctgaactg gcgtagcaag ttgtgtacct gccaagactg tatgaaaatg
                                                                     1020
                                                                     1080
tatggagate tagatgtett atteetgaca gatgaataeg acacagttet ggettatgaa
aacaaaggga agattgccca ggccactgac aggagcgatc ccctaatgga tacccttagc
                                                                     1140
                                                                     1200
agcatgaata gagtccagca agtggaactc atttgtgaat acaatgattt gaagactgaa
cttaaagact atctcaagag atttgctgat gaaggcacgg ttgttaagag agaggacatt
                                                                     1260
cagcagttct ttgaagagtt tcagtcaaaa aagagaagaa gagtggatgg gatgcagtat
                                                                     1320
                                                                     1380
tactgcagct agagtggagt atgaagcttt ctcattcaag ccaatgaaaa tgcgcttccc
attettggaa taaaagaggt gtggtteaca ttttggeecee ttteegteet cetetgtttg
                                                                     1440
gagaggeete gegeteeett eattetettt agetgeagta geeacegtgt ggatgetgae
                                                                     1500
ttcacagcca gcgtcctctg tgactcagct gatgcagctc attccacaga cttcgccagt
                                                                     1560
gtactcctac tccagtgcac ccagggttat ttgcatagtt tttaagtttg attttgtttt
                                                                     1620
gagaaagcaa atttggtgtc tttgtttaat gatctgttat ttcactccca gatgtgtgt
                                                                     1679
```

```
<210> 5968
<211> 1442
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (468)...(1241)
<223> similar to gi554204 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5968
tgaaactctc agcggaaagc tacaaggaaa cacagatggt gaagattaaa gaggaaccca
                                                                       60
tggaggttga catccaggac teccatgtet egatateace cageeggaat gttggetaca
                                                                      120
gcactttaat cgggcgagag aaaaccgaac ccttacagaa gatgccagag ggcagagtac
                                                                      180
ccccagagag aaacctcttc agtcaggata tctctgtgaa aatggcttcc gagctcctct
                                                                      240
ttcaactgtc agaaaaagtg agcaaagagc acaatcatac aaaagaaaac accatccgga
                                                                      300
ccacgaccag ccctttcttt tcagaagaca catttagaca atcaccattc acctccaatt
                                                                      360
caaaagaact getgeeeagt gacteegtge tgeaeggaag aatateaget eeagaaacag
                                                                      420
aaaagatagt cctagaggca ggaaatggat taccatcctg gaaattcaat gaccagcttt
                                                                      480
ttccctgtga cgtgtgtggg aaagtgtttg gccgacagca gacattqtcc cgacacctct
                                                                      540
cgctgcacac agaggaaaga aaatacaaat gccacttgtg cccctatgct gctaagtgcc
                                                                     600
gtgcaaatct gaaccagcac ttgaccgtcc attccgtgaa gctggtgagt acagacaccg
                                                                      660
aggacattgt cagcgccgtc acctctgaag gcagtgatgg gaagaaacat ccttattatt
                                                                      720
acagttgtca cgtgtgtgga tttgagaccg agctcaatgt ccagtttgtc agccacatgt
                                                                      780
cactccacgt ggacaaggag cagtggatgt tttcgatctg ctgcactgcc tgcgacttcg
                                                                      840
tcaccatgga ggaagcagag ataaagactc acattggcac caagcacaca ggggaagaca
                                                                      900
ggaagacccc cagcgaatca aatagcccct cttcatectc cctctcagct ctgagtgatt
                                                                      960
cagccaacag caaagatgat tcagatggct cccagaaaaa caagggcggg aacaatctgc
                                                                     1020
tggtcatctc tgtcatgcct gggagccagc cctcactgaa cagtgaggaa aagccagaga
                                                                     1080
aagggttcga atgtgttttt tgcaactttg tctgcaagac gaagaacatg tttgagcgtc
                                                                     1140
atctgcagat acacctcatc acccggatgt ttgagtgtga tgtgtgccac aagttcatga
                                                                     1200
agacceeega acagetgetg gageataaga aatgeeacae tgteeecace ggtgggetea
                                                                     1260
atttatgttc taggatgacc aagtagaaga atactttgaa aaaattgata atgccttctg
                                                                     1320
getatacagt geceattetg catttattee accaacegee eegetgeeat ggagtgeeae
                                                                     1380
ctcaagaccc actacaagat ggagtacaag tgccggatct gccagacggt gaaggccaac
                                                                     1440
```